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THE

British Fruit-Gardener;

AND

ART OF PRUNING:

COMPRISING,

The most approved Methods of PLANTING and RAISING every useful FRUIT-TREE and FRUIT-BEARING-SHRUB, whether for Walls, Espaliers, Standards, Half-Standards, or Dwarfs:

The true successful Practice of PRUNING, TRAINING, GRAFTING, BUDDING, &c. so as to render them abundantly fruitful:

AND

Full Directions concerning SOILS, SITUATIONS, and EXPOSURES.

By JOHN ABERCROMBIE;

Of TOTTENHAM-COURT, Gardener:

AUTHOR OF

EVERY MAN HIS OWN GARDENER,

First published under the Name of Tho. MAWE.

LONDON:

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A-ADAMS

PREFACE.

NUMEROUS are the Treatiſes written on the preſent ſubject; few of them, however, have fairly reſulted from *Practice*, and therefore it is little to be wondered, that they have been found erroneous and deficient, and liable to miſlead in the moſt eſſential particulars.

The following ſheets are intended to exhibit the cultivation of fruit-trees on an improved, and, at the ſame time, on a conciſe plan, according to the true ſucceſsful practice of our moſt eminent Gardeners, in raiſing and forwarding every ſpecies of Wall-Trees, Eſpaliers, and Standards, to their full perfection of bearing.

With

With regard to the Method purſued, it may be allowable to obſerve, that the directions, concerning the reſpective articles, are not confuſedly ſcattered up and down, in diſtant parts of the work, nor are the operations belonging to ONE, confounded with thoſe of another: in this Manual the reader will find every Fruit-tree ſeparately and compleately treated of, as to its Botanic Claſs and Genus, its Growth, Mode of Bearing, Flowers, Fruit, and time of Ripening; its method of Propagation by Grafting, Budding, Layers, Cuttings, Suckers, or Seeds; and the different Stocks ſuitable to the particular nature of the Tree, with regard to Grafting and Budding. All which are pointed out under the name of that Fruit-tree to which they reſpectively belong.

As

As Wall and Eſpalier Trees require ſingular care in the different operations of Pruning and Training, both in Summer and in Winter, theſe works are here explained with reſpect to the different ſtages of growth, and order of bearing.

Concerning common Standards, the reader will alſo find ample directions: theſe do not require, indeed, like Wall-trees, a general pruning; a ſtrict attention, however, as well to their early growth, as to their advanced ſtate, being neceſſary, they were not to be omitted.

The favourable reception of a former* Work has encouraged it's author to ſub-

* *Every Man his own Gardener*, ſeven Editions of which have been printed. — This Work, from a diffidence in the writer, was firſt publiſhed as the production of "Thomas Mawe, Gardener to his Grace the Duke of Leeds, and other Gardeners:" it was

mit

mit to the lovers of Gardening, this his Practice in the Culture of Fruit-trees. Indeed, even after ſome of the ſheets were printed off, his idea, of it's bulk had not extended beyond the limits of a pamphlet: he was not aware, that by printing merely from *Practice*, before he had planned his Treatiſe in Manuſcript, he was liable (as it has now happened) to encreaſe his Pamphlet to a VOLUME.

He has only to hope, as general utility was his firſt motive to both theſe publications, that he ſhall not be accuſed of preſumption, if he flatters himſelf that his labours in both will be equally acceptable.

however entirely written by the author of the following ſheets: whoſe claim has ſince been, in ſome meaſure, aſſerted, by ſubjoining to the Title-page of the latter Editions, the name of JOHN ABERCROMBIE, to the more popular one of Mr. MAWE.

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Speedily will be publiſhed,

THE

Gardeners Pocket Dictionary:

IN A

SYSTEMATIC ARRANGEMENT

OF

All Trees, Shrubs, Herbs, Flowers, and Fruits; With their Uſes, Propagation, and Culture, in the Britiſh Gardens and Plantations, Green-Houſes and Hot-Houſes,

Alphabetically digeſted, and divided into the following Heads;

I. Hardy Trees and Shrubs,
II. Herbaceous Plants,
III. Green-Houſe Plants,
IV. Hot-Houſe Plants.

The Whole comprehending

The General Practice of Gardening, and forming a Daily Remembrancer to Gardeners, Nurſery-men, Floriſts, Seedſmen, and all Promoters of Horticulture; agreeable to the Linæan Syſtem, with the Latin and Engliſh Names.

THE

ALMOND TREE.

THE Almond is eminent both as a fruit tree, and for ornamenting the ſhrubbery, &c. early in ſpring, when in full bloom; and is the original of the ancient genus *Amygdalus*, which, by the botanic characters of the flowers, comprehends alſo the Peach and Nectarine, as ſpecies and varieties of the ſame family or genus; all of which belong alſo to the claſs and order, *Icoſandria monogynia*, *i. e.* flowers containing twenty or more ſtamina and one ſtyle.

The botaniſts admit but of one real ſpecies of the common Almond Tree, which they term

Amygdalus communis, COMMON ALMOND; and is botanically deſcribed, *Amygdalus with ſpear-ſhaped ſawed leaves, having glands at the baſe: and with flowers moſtly in pairs, ſitting cloſe to the branches, ſucceeded by large oval, downy, tough fruit, containing eatable kernels*, comprehending ſeveral eminent varieties, diſtinguiſhed by the following names and properties, viz.

1 Common Almond with a bitter kernel.

2 Sweet-kernelled Almond.

3 Sweet Jordan Almond, large and ſuperior in goodneſs.

4 Tender

4 Tender-ſhelled Almond.

5 Hard-ſhelled Almond.

The fruit, in general, of the Almond tree is valued only for the kernel incloſed in its centre in a ſtone or nut, it being the only edible part; and is by many greatly eſteemed as a choice deſert fruit to eat, as well as for various domeſtic purpoſes.

Conſidered as a fruit tree, the Almond, in all its varieties, deſerves a place in almoſt every garden, to encreaſe the variety of eatable fruits, eſpecially as ſtandard and half ſtandard trees, in which they will alſo adorn the premiſes very conſpicuouſly in ſpring, during their general bloom, and ſupply us with annual crops of fruit without trouble; ripening in September.

The trees generally aſſume but a moderate growth, obtaining from fifteen to twenty feet ſtature, dividing regularly into many branches, and emitting numerous ſtraight ſhoots annually; the whole forming a large full head, adorned with long ſpear-ſhaped leaves, and pale-red flowers, having five petals, producing flowers and fruit, moſtly on young wood of a year or two old, immediately from the eyes of the ſhoot.

They flower early in Spring, before the leaves; ariſing in a vaſt profuſion all along the young branches at almoſt every eye, ſucceeded by large oval downy fruit, conſiſting of a thick tough pulp, including an oblong nut or ſtone, containing one kernel, which is the Almond,

mond, and the only eſculent part, as before obſerved; the whole arriving to maturity in September; the outer tough cover ſplits open, and diſcharges the ſtone, with the kernel therein, which is fit both for immediate eating, and to be kept for future uſe.

The trees are all hardy enough to ſucceed in any common ſoil of our gardens, in almoſt any ſituation and expoſure; and in favourable ſprings, when their early bloſſom is not deſtroyed by froſt, they generally produce abundant crops of fruit. However, when deſigned as fruit trees, they ſhould generally be indulged with a ſheltered ſunny ſituation.

They are employed principally as ſtandards and half ſtandards, trained with ſtraight ſingle ſtems, ſix or ſeven feet

feet high for full ſtandards, and four or five for half-ſtandards, branching out at theſe reſpective heights, all around into regular heads, planted at twenty or thirty feet diſtance, and ſuffered to extend every way nearly according to their natural order of growth; though, for variety ſometimes a few trees are cultivated, as dwarfs, for walls and eſpaliers, and trained in the order of wall trees, &c. nearly as directed for Peaches and Nectarines, and in which they often furniſh larger and forwarder fruit than on ſtandards.

Obſerving, that as this tree bears principally on the young wood, we, in performing the occaſional prunings, muſt carefully preſerve a general ſupply of each year's ſhoots as ſucceſſion bearers; as in peaches, &c.

The

The Method of Propagating them, both as Standards and Dwarfs.

The method of propagating Almond Trees, is both by ſowing the ſtones of the fruit, and by inoculating buds of the approved ſorts upon ſtocks of the Plum, Peach, or Almond; but as the ſeedlings generally vary to different ſorts, the budding or inoculation is the only method by which we can continue the varieties permanent with certainty; and they alſo ſooner attain a fruitful ſtate.

Take, however, both the methods of raiſing them, as follow:

By Seed.——Procure a quantity of the ſtones of the beſt Almonds that are well ripened in Autumn, and either proceed to ſow them in October or November, if quite dry ground, or preſerve

ſerve them in ſand, in the dry, till February, preparing for their reception a ſpot of any good light ground, and drill in the ſtones two inches deep, in rows a foot aſunder; and when the young plants are a year or two old, plant them out in Autumn or Spring, with the ſpade or dibble, in nurſery lines, a yard diſtance, and half that diſtance in each row. Train thoſe deſigned for ſtandards, with tall ſingle ſtems, from five to ſeven or eight feet high, by pruning off all ſide ſhoots to the height intended; then juſt top them with your knife at the proper height, either as full or half ſtandards, to force out a ſet of branches more regularly in the part required to give the head its firſt regular form; afterwards let them branch out in their own way, and form a full head. But if any are

intended

intended to form dwarfs for walls, &c. they may be topped in their minor growth within a foot of the ground, to obtain branches below to cover the wall and espalier regularly from the bottom, and trained as hereafter directed.

But when any of these seedling Almonds are intended as stocks in which to bud any of the approved varieties, they must not be topped or headed, but trained straight up till after the budding is performed.

By Budding or Inoculation.——The propagation of Almonds by budding is effected by introducing buds of the approved varieties into Plum, Peach, or Almond stocks, raised from the stones of the fruit, as directed above in raising the seedling Almonds, and planted out in

nurſery-rows a yard aſunder, in order to be trained to the proper ſizes for the reception of the buds.

If for ſtandards, may either uſe low ſtocks of two or three feet in height, in order for the bud to be inſerted near the ground, and the firſt ſhoot trained up for a ſtem; or the ſtocks may be previouſly run up to ſtems the proper height, from five to ſix or ſeven feet, to receive the bud near the top, at the height proper to form the firſt branches of the head—But

When deſigned as wall or eſpalier trees, ſtocks of two or three feet ſtems are ſufficient, as the budding muſt be performed within half a foot of the ground.

Thus,

Thus, the ſtocks being ready, the budding is performed in July, in the uſual method *(ſee Budding)* and in the Spring following the buds ſhoot forth, each one ſtrong ſhoot attaining two or three feet in length by Autumn, and commences the new tree.

Then the firſt ſhoot from the budding is to be managed, as the caſe requires, to give the trees their firſt proper form. If ſuch ſtandards that are budded low in the ſtock, the firſt ſhoot muſt be run ſtraight up to form a ſtem of proper height; but if the ſtandards are budded at top of the ſtock, and this forms the ſtem, the ſaid firſt ſhoots ſhould, generally, either the ſame Summer in June, or in March following, be headed down to ſix or eight inches; as alſo thoſe of the dwarf trees,

to force out from the lower eyes a ſupply of three four or more new ſhoots near the top of the ſtem, to commence the head in its firſt regular formation. After this, generally permit the ſtandards to branch in their natural way; and let the dwarfs have their branches trained horizontally to ſtakes, while in the nurſery, afterwards to the wall or eſpalier.

The trees thus raiſed, ſhould, when from one or two to five or ſix years old, have their final tranſplantation into the garden or orchard, &c.

Planting, and general Culture.

As to planting, the proper ſeaſon for this is any time from the end of October till March, in open weather; having the trees dug up carefully in the nurſery

with

with all the roots poſſible, and of which prune off only broken parts, and any ill-placed rambling ſhoots of the head; then opening capacious pits for their reception, twenty or thirty feet diſtance for the ſtandards, and fifteen or eighteen for the wall and eſpalier trees, plant them with due care, and a pot of water given to each tree will ſettle the earth properly, and promote their rooting. See *Planting*.

Then with reſpect to the general culture in the Garden, &c. obſerve as follows:

Firſt, in regard to the ſtandards; they having had their firſt ſhoots ſhortened in the nurſery as directed, and thereby obtained

obtained ſeveral well-placed branches near the top of the ſtem, to adorn the head with a regular ſhape, ſhould now ſuffer the whole to branch out freely every way, and only juſt reform with your knife any very irregular-placed branch, and long rambler, or thin out occaſional crowded wood, leaving always the general ſupply of regular branches entire, and ſuffered to ſhoot according to nature.

Next, with regard to the wall and eſpalier Almonds; they having their firſt ſhoots from the budding headed down in the Spring, as already directed, and having obtained three, four, or more regular branches near the bottom, train them horizontally to the wall, equally

to the right and left, at full length all Summer; and in Winter or Spring following may prune them to ten or twelve inches, to promote a farther neceſſary ſupply of ſix, eight, or more, regular branches below, training them as above, after which they need not be pruned ſo ſhort, but continue encreaſing the number of horizontals every year, trained five or ſix inches diſtance, till they cover the aſſigned ſpace of walling and eſpalier in a regular expanſion.

And, as the trees thus trained will throw out numerous uſeleſs ſhoots every Summer, they will accordingly require a general pruning and training every Summer and Winter, in common with other wall and eſpalier trees; in order, both

both to retrench close the superfluous young wood, all fore-right, and other irregular shoots of each year, that cannot be trained in. Therefore, going over the trees timeously every Summer, rub or prune off close all the above evidently useless growths; selecting at the same time a sufficient general supply of the regular side shoots for succession bearers, and trained at full length till Winter: Then in Winter pruning, chusing a full supply of the best situated of the last Summer shoots in every part, let all the others that are not wanted be cut away quite close: likewise, at this pruning, cut out part of all the old horizontals or former bearers, down to the best placed young shoots they support; and the general supply of young wood, now

retained,

retained at four or five inches diſtance, ſhould generally in this, the Winter pruning, be moſtly ſhortened, more or leſs; the ſmaller ſhoots to eight or ten inches, and the ſtronger ones to twelve, fifteen or eighteen inches, or two feet long, or more, according to their ſtrength, to promote their producing more certainly a requiſite ſupply of lateral ſhoots next Summer from the lower eyes, properly ſituated to train in for ſucceſſion bearers, as in the Apricot, Peach, and other trees, that bear principally on the young wood. *(See peaches, &c.)*

Then, as ſoon as ever a tree is thus Winter-pruned, let the whole be directly nailed regularly to the wall, or

tied to the eſpalier, ranging the branches horizontally, and equally to both ſides, as before, four, five, or ſix inches aſunder, no where croſſing, but all laid parallel or beſide one another, at theſe diſtances, and faſtened along as ſtrait and neat as poſſibe.

APPLE-

APPLE-TREE.

THE Apple is juſtly eſteemed the beſt fruit-tree in the world, for the great value of its moſt excellent fruit, for numerous important domeſtic uſes all the year round, and comprehends varieties without end, all the offſpring of one original ſpecies, which by the botaniſts is retained as a ſpecies of *Pyrus*, or Pear-tree, their mode of bearing, and botanic characters of the flowers, &c. being exactly ſimilar; and although the fruit differs in external form, yet they perfectly correſpond internally; but the Apple, however, was long conſidered as a diſtinct family, or

genus, under the title of *Malus*, till, by the laws of modern botany, it was ranged as a ſpecies only of the genus *Pyrus* aforeſaid; and they both belong to the claſs and order *Icoſandria Pentagynia*, i. e. flowers having twenty or more ſtamina, and five ſtyles.

There is only one real ſpecies of the common Apple tree, comprehending many varieties, and is by the botaniſts entitled,

Pyrus Malus, i. e. the APPLE TREE, and is botanically deſcribed—*Pyrus, with oval ſawed leaves, and the flowers produced in cloſe-ſitting umbels*, ſucceeded by large round and oblongiſh fruit, concave at the baſe; this being the

the ſpecific diſtinction of the Apple-tree. It compriſes numerous varieties, differing both in the ſize of the trees in their general growth, as well as in the ſtrength of the ſhoots, ſize and colour of the leaves; but more conſpicuouſly in the ſize, ſhape, colour, qualities, and times of ripening of the fruit; the varieties of which, no doubt, amount to ſome hundreds.

However, in reſpect to the fruit, we ſhall exhibit a catalogue of only the principal well-approved ſorts, and ſuch that are known and readily obtained in all the public nurſeries, by the names annexed in the following liſt, which exhibits alſo their time of ripening.

JENNETING, or June-eating Apple, *July.*

CODLIN. *July till Sept.*

MARGARET APPLE. *Auguſt.*

QUINCE APPLE. *September.*

KENTISH CODLIN, *large. Aug. and Sept.*

SUMMER PEARMAIN. *Aug. and Sept.*

SCARLET PEARMAIN. *Aug. and Sept.*

GOLDEN RENNET. *Sept. and Oct. &c.*

GOLDEN RUSSET. *Sept. and Oct. &c.*

SUMMER REMEOURGE. *Aug. and Sept.*

SUMMER CALVILLE. *Aug. and Sept.*

RED AUTUMN CALVILLE. *Sept. and Oct.*

WHITE AUTUMN CALVILLE. *Sept. & Oct.*

GOLDEN PIPPIN. *Sept. Oct. and Winter.*

AROMATIC PIPPIN. *October, &c.*

WHITE RENNET. *October, &c.*

LOAN'S PEARMAIN. *Sept. and Oct.*

ROYAL PEARMAIN. *Sept. and Oct.*

VIOLET APPLE. *Oct. and Winter.*
NONPAREIL. *Oct. Nov. Winter, &c.*
LARGE NONPAREIL. *Oct. and Nov.*
ROYAL RUSSET. *October till Spring.*
RENNET GRISE. *October and Winter.*
MONSTROUS RENNET. *Oct. Nov. &c.*
WHEELER'S RUSSET. *Oct. and Winter.*
KENTISH PIPPIN. *October, &c.*
COURPENDU, or HANGING BODY. *September, October, &c.*
HOLLAND PIPPIN. *Oct Nov &c.*
KIRTON PIPPIN. *Sept. and Oct.*
WINTER GREENING. *Oct. and Winter.*
ANISE APPLE. *Sept. October, &c.*
ORANGE PIPPIN. *Sept. Oct. &c.*
WINTER PEARMAIN. *October, &c.*
PILE'S RUSSET. *October till Spring.*
STONE PIPPIN. *Oct. and Nov. till Summer*
EMBROIDERED APPLE. *October, &c.*

GREY LEADINGTON. *Sept. Oct. &c.*
LEATHER-COAT RUSSET. *October and Winter.*
NONE-SUCH. *September, October, &c.*
WINTER QUEENING. *Oct. Nov. &c.*
POMME D'API. *Sept. Oct. and Winter.*
CAT'S HEAD. *September and October.*
WHITE COSTIN. *September and October,*
LEMON PIPPIN. *October, &c.*

To the above varieties may alſo be added the *Wilding, or Crab-Apple,* and the *Paradiſe,* or *Dwarf-Apple,*—But

The *Crab Apple,* ſuppoſed the original, or parent ſpecies of the whole, is valued only principally to raiſe for ſtocks, on which to ingraft the cultivated apples; and for the fruit, to make verjuice.

And

And the *Paradiſe Apple*, which is of very dwarfiſh growth, is chiefly uſed only for ſtocks to graft upon, to form very low dwarf trees, as we ſhall have occaſion to mention.

Thus we may obſerve, by the foregoing liſt, the varieties of Apples are very great; and there are ſtill a much greater variety than here mentioned, but thoſe are the beſt we can recommend; and of which, about fifteen or twenty different ſorts, that follow one another ſucceſſively in perfection, may be ſufficient to furniſh a ſupply the year round; however, where there is full ſcope of ground, a perſon may indulge his fancy with a more conſiderable variety, chooſing a proper collection both of

Summer and Winter kinds, but moſt of the latter, for general uſe; the trees of all which may be had at the public nurſeries, in the greateſt perfection, both ſtandards, and eſpaliers, &c. and may be all eaſily raiſed by grafting, as hereafter directed.

The Apple tree grows twenty feet high, or more, with a large ſpreading head, and produces its flowers and fruit upon ſpurs, ſhort robuſt ſhoots, half an inch or an inch long, iſſuing from the branches of from two or three, to many years old, appearing firſt towards the upper parts; ſo the branches muſt never be ſhortened in the general courſe of pruning.

The trees are very hardy, ſucceed in any

any common ſoil of a garden or orchard, or in any ſituation where it is not very wet, which we ſhould abandon, for they do not proſper in low wet ground; generally allotting them an open expoſure, free to the ſun and air.

They ſucceed both as ſtandard trees, half-ſtandards, and in eſpaliers; but we rarely indulge them with a wall, as they ripen their fruit abundantly well without that aſſiſtance. In eſpaliers, however, we ſhould generally allot a good collection of the beſt Eating Apples, as in that order of training they commonly attain ſuperior perfection, in regard to ſize and beauty, than on common ſtandard trees; but all the ſorts alſo acquire perfect maturity on ſtandards;

and it is the common full ſtandard trees, that furniſh us with the principal ſupply of all ſorts of Apples for general uſe, being planted in ranges in the garden or orchard, thirty or forty feet diſtance, and permitted to branch out every way according to nature; and the eſpalier trees, planted twenty feet diſtance, with their branches ranged horizontally to the trellis, always at full length, becauſe ſhortening thoſe trees would cut away the very firſt bearing parts, and retard their bearing, eſpecially as they begin bearing firſt towards the ends of the branches.

The full ſtandards are trained with tall upright ſtems, ſix or ſeven feet high, before permitted to branch out

to

to form the head, and are the proper trees for general culture as ſtandards. And half ſtandards are trained with ſtems only three, four, or five feet high, then ſuffered to branch out at that height, and form the head.

But dwarf trees for eſpaliers, &c. are trained with low ſtems, only ten or twelve inches high, in order that they may form branches near the ground, to cover the whole eſpalier from the bottom to top.

And dwarf ſtandards are alſo trained with low ſtems, only a foot or two high, for ſmall gardens, and by way of variety.

Method

Method of Propagation.

With regard to the method of propagating Apple-trees, all the different varieties having been firſt obtained accidentally from ſeed, and as they rarely come to the ſame ſorts again by that method of propagation, the approved ſorts thereof are propagated, and continued permanent, only by grafting ſhoots of them into any kind of the common Apple, or Crab; ſtocks raiſed from the kernels of the fruit, for all common ſtandards and eſpalier trees; alſo, occaſionally, upon Codlin ſtocks, raiſed from ſuckers, cuttings, and layers, to form moderate ſtandards, eſpaliers, and dwarf ſtandards; and on Paradiſe ſtocks to have very dwarf

dwarf trees, to accommodate ſmall gardens, and for curioſity.

All ſtocks, raiſed from any kind of cultivated Apples, are called free ſtocks, to diſtinguiſh them from crab ſtocks, and from the dwarf ſtocks of the Codlin and Paradiſe Apple.

Having obſerved thus far, let the ſupply of common ſtocks for general grafting, for common ſtandards and eſpalier trees, be raiſed from the kernels of any ſort of Apples or crabs, aforeſaid, ſowed in Autumn, Winter, or Spring, in beds of light earth, drilled or bedded in an inch deep; *(ſee Stocks)* they will come up in the Spring; and in Autumn, or Spring following, plant out the

the ſtrongeſt in nurſery rows, a yard aſunder; here trained three or four years, or till ſeven feet high for full, and four or five for half ſtandards, and for eſpaliers and other dwarf trees, two or three feet high is ſufficient; though ſometimes ſtandards are alſo grafted on low ſtocks near the ground, and the firſt ſhoot from the graft trained up the proper height for a ſtem.

The grafting is performed in March, by whip-grafting for ſmall ſtocks, and cleft-grafting for larger; cutting the grafts from trees noted for bearing the beſt fruit, and proceed to ingraft them in the uſual method; (*ſee Grafting*) previouſly heading the ſtocks; the ſtandards, at from four to five or ſix feet height,

height, and eſpaliers and other dwarfs within ſix or eight inches of the ground; ſo inſerting the graft at top, one in each ſtock, they will all ſhoot forth the ſame year, each three, four or more ſhoots effecting the firſt formation of the head, which you will form for the purpoſes intended, whether they remain in the nurſery, or tranſplanted into the garden at a year old.

Such, for example, the ſtandards, if furniſhed with four or more regular ſhoots in the head, they may either have the ſaid firſt ſhoots remain entire, if you would have them form a more erect and lofty head; or, if the preſent firſt-ſhoots are not ſufficient to give the head its proper form, may ſhorten

them in Spring following to five or ſix eyes, to force out more branches the enſuing Summer, near the top of the ſtem, if you deſign them to form a lower, more full, and wide ſpreading head; after this, however, permit the whole to branch out every way at full length, and they will thus form a bearing ſtate in two or three years.

And as to the eſpaliers and dwarf ſtandards, it is generally adviſable to ſhorten all the firſt ſhoots from the graft, in March following, to five or ſix inches, to obtain a good ſupply of lower branches in Summer, to form the head more full and regular, quite from the bottom; afterwards trained generally all at full length. Thoſe of the eſpalier trees

ranged

ranged equally to both ſides horizontally to ſtakes, diſplacing any fore-right, irregular ſhoots that cannot be trained in with regularity : and the regular trained branches being continued always at full length, they in two or three years emit many fruit ſpurs, and commence bearers. See their *General Culture.*

Thus the young trees, both ſtandards and eſpaliers, when from one or two to three or four years old, are proper for final tranſplantation into the garden or orchard, &c. as below.

Planting them in the garden, &c.

As juſt above obſerved, Apple-trees of from one or two to three or four

years old from grafting, having formed good heads, furniſhed with ſeveral branches, are more eligible than older trees for planting; and the proper planting ſeaſon is any time from November till March, in open weather.

At the proper time let the trees be digged up in the nurſery, with all the roots as entire as poſſible, pruning off only broken parts, and leave the head wholly entire, except juſt retrenching any ill-placed ſhoot, not conſiſtent with the general form; then plant them according to the uſual method; (ſee *Planting*) the full ſtandards thirty or forty feet diſtance, both in the garden and orchard, the half ſtandards not leſs then twenty five feet aſunder, and the eſpalier

eſpalier trees twenty feet diſtance at leaſt, with their branches ranging the way of the eſpaliers; but if grafted on free or crab ſtocks, twenty five feet is not too much; and thoſe upon codlin ſtocks, not leſs than ſixteen or eighteen feet diſtance; but thoſe that are on paradiſe ſtocks, fifteen feet may be ſufficient: the ſame rules are to be obſerved in planting dwarf ſtandards.

As ſoon as planted, let the high ſtandards be properly ſupported with ſtakes, and faſten the branches of the eſpalier trees along to the trellis or ſtakes of the eſpalier. *(See Planting.)*

General Culture of Pruning, &c.

Firſt in reſpect to pruning of ſtandard Apples: they having formed heads furniſhed

niſhed with ſeveral regular branches, extending each way, by the rules obſerved in their nurſery culture, ſhould generally proceed with the whole at full length, branching out freely every way around to their full extent, and form a full ſpreading head; and thus they will naturally emit numerous fruit ſpurs all along the ſides of the branches as they advance in length, and bear abundantly without trouble of much pruning; for ſtandards having full ſcope to branch out fully on all ſides, require but only a trifling pruning, probably once in in ſeveral years, juſt to retrench any very ill-placed branch that grows aukwardly acroſs the others, &c. reduce long ramblers and low ſtragglers, or occaſionally to thin ſuch as crowd or confuſe the head conſiderably, and

caſual

caſual worn-out barren branches, and all decayed wood, cutting cloſe, either to their origin, or down to ſome commodious lower ſhoot or branch, as it ſhall ſeem convenient, and to cut out alſo all ſuckers or ſhoots from the ſide of the ſtem, or that riſe in the middle of the head. See *Pruning Standards.*

But as to the eſpalier Apple trees, they being limited to a certain ſpace, both in height and extent ſideways, having their branches trained at regular diſtances, and as they will annually produce many more ſhoots than are wanted, or can be trained, conſiſtent with the general regularity, they conſequently require a general pruning and training every year, to retrench the redundant and irregular

irregular wood, and to train in occaſional new ſupplies where wanted.

In the infant ſtate of eſpalier trees, our principal care is to procure a good ſpread of lower branches to furniſh a proper baſis, as it were, to ſupply others regulary upward, to cover the eſpalier equally from bottom to top, with bearers; which depends wholly on the firſt and ſecond year's pruning, by ſhortening the firſt ſhoots more or leſs, as directed in the nurſery; ſo that ſuppoſing the new planted trees are only one year old from grafting, and their firſt ſhoots or head entire, not being ſhortened in the nurſery as directed, it muſt now be done in the Spring, cutting each ſhoot to five or ſix inches,

as

as directed in the nurſery culture, to obtain a more abundant and regular ſupply of branches below, conſiſting of ſix, eight, or more, ranging regularly the way of the eſpalier.

But, if the young trees were previouſly headed once or twice in the nurſery, as there adviſed, and thereby furniſhed a proper ſupply of lower laterals, forming a regular ſpread of eight or more branches, near the bottom, as aforeſaid, we need not practice pruning ſhort hereafter, as having now obtained a good foundation below, they will generally afford a ſufficient ſupply gradually to fill the eſpalier upward.

In this caſe it is adviſable to train

the whole now principally at full length, horizontally along to the eſpalier, for bearers, ranging an equal number to both ſides, five or ſix inches aſunder, tying the branches cloſe to the trellis; and, as they advance in growth, ſtill continue them at full length; for ſhortening would retard their bearing and force out uſeleſs wood; ſo only ſhortening an occaſional ſhoot, where wood is wanted to fill a vacancy, being either pinched down to a few eyes early the ſame Summer, or cut ſhort in Spring, to force out three or four ſhoots below.

In this manner continue increaſing the ſupply of horizontals or bearers annually upward, at the above diſtance, one above another, till they by degrees

cover

cover the eſpalier regularly to the top, at the ſame time being careful to retrench all ſuperfluous and irregular wood of each year, as directed below, taking them off always quite cloſe, faſtening the regular branches always ſtraight and horizontally to the eſpalier.

Thus, the branches being trained always at full length, they will ſoon all emit numerous fruit ſpurs, and bear plentifully, and will continue increaſing the ſupply of fruit ſpurs as they advance, and the ſame branches continue improving in bearing for many years.

Their General Pruning in Eſpaliers.

Remembering, as the ſame branches continue fruitful many years, no gene-

ral ſupply of wood is wanted annually, after the trees are fully trained, as in Almonds, Peaches, and Nectarines, &c. which bear only on young ſhoots of a year old, but only now and then a ſhoot retained here and there, as hereafter explained.

Remark, likewiſe, in the general pruning of theſe trees, never to ſhorten the branches, becauſe, as they bear firſt towards the extreme parts, and encreaſe the number of fruit ſpurs as they advance in length, that, if ſhortened, would cut away the very firſt bearing parts, and every ſhortening would retard their bearing two years, beſides promoting a great luxuriancy, and in the places where fruit ſpurs would have likewiſe

appeared,

appeared, ſend forth numerous ſtrong uſeleſs wood, and no fruit.

Eſpalier Apple trees in generalr require pruning and training every Summer and Winter to preſerve the regular form, &c. by retrenching the redundant, and training in the proper growths.

The Summer pruning is requiſite in order to reform the irregularities of the ſame year's growth, ſo ſhould begin to go over the trees in May, or early in June, before the ſhoots of the year are much advanced, and carefully prune out all the fore-right, and evidently ſuperabundant and unneceſſary young ſhoots, retrenching them quite cloſe; which, if begun early before the

ſhoots

ſhoots become woody, may be effected with the thumb, otherwiſe muſt uſe the knife; being careful to leave the terminating ſhoot of every horizontal or bearer entire, where there is room to extend them, and reſerve here and there a well placed ſtrong ſhoot towards the lower parts, at full length, eſpecially where there is any apparent defect or vacancy, or if none, it is proper to leave ſome good ſide ſhoots in different parts, till Winter pruning, in caſe of any unforeſeen vacancy; and if then not wanted, are eaſily retrenched: training at the preſent the whole reſerved ſupply cloſe to the eſpalier; and continue them ſo with the greateſt regularity all the Summer, by reviewing them frequently during the Summer's growth,

growth, to retrench all after-ſhoots, reform occaſional irregularities, and to train in the reſerved ſhoots as they advance in length.

It is highly adviſable to begin the Summer pruning, &c. of eſpalier trees, early in the ſeaſon: as the work is then not only more eaſily performed with expedition and truth, either by rubbing off the buds when quite young, or by pruning with the knife the more advanced ſhoots, but it alſo contributes exceedingly to the proſperity of the fruit in general, as well as to the beauty and regularity of the trees during their Summer's growth.

The Winter pruning may be performed

formed any time from the fall of the leaf, in November, until March, and conſiſts of a general reform, where neceſſary, both of pruning and training; previouſly remarking, as before obſerved, that, as the ſame bearing branches remain fruitful many years, they muſt be every where preſerved while they ſupport a good bearing ſtate; and and only introduce a ſupply of new bearers occaſionally; as below,

So that in the operation of Winter pruning eſpalier Apples, we muſt examine both the general bearers, and the occaſional reſerve of the laſt Summers wood; that if any worn-out, or naked old wood, not furniſhed good fruit-ſpurs, occurs, now is the time to retrench it, by pruning down to ſome more eligible

lower

lower branch, or young ſhoot, properly ſituated to ſupply its place, or where the general branches are too much crowded, ſhould alſo at this ſeaſon thin out the moſt irregular, and cut out dead wood; at the ſame time, if there are any vacancies, retain ſome contiguous ſide ſhoots reſerved in Summer, to ſupply the deficiencies, or if any good ſhoot offers towards the bottom contiguous to very old branches, it may be trained up between, to a bearing ſtate, to be ready when wanted; all other young ſhoots retained laſt Summer, not now wanted for a ſupply of wood, either to increaſe the requiſite ſpread of bearers, or to fill any caſual vacant ſpace, muſt be

cut clean out close to their origin, leaving no ſtump, being careful, however, to preſerve the terminating or leading ſhoot of every horizontal or bearer generally entire, and extended in length as far as the allotted ſpace will admit;

Likewiſe preſerve with the greateſt care all the fruit ſpurs in every part, except any are become very old and barren, or project too conſiderably fore-right, which retrench cloſe;

And all cluſters of large ragged uſeleſs ſpurs, formed by the remaining ſtumps of ſhortened ſhoots, left by injudicious pruning, ſhould now be pruned cloſe off, leaving no ſtump or

ſpur

ſpur but the proper fruit ſpurs, naturally produced;

For, in retrenching the ſuperfluous and bad wood, we ſhould always cut quite cloſe, leaving no ſtump, as is too commonly practiſed, whereby, they ſhooting out at every remaining eye next Summer, crowd the tree with innumerable uſeleſs branches, occaſioning great trouble to retrench them, which, by unſkilful pruners, are ſtumped off again to an inch or two long, continuing the ſame practice from year to year, forming, at laſt, thoſe large cluſters of unſightly uſeleſs ſpurs we often ſee in ill-managed eſpalier trees.

After the general reform of Winter pruning, let all the branches be regularly ranged in their proper horizontal poſition, at equal diſtances, cloſe to the trellis of the eſpalier, as ſtraight as poſſible at their full length, if room permits, tying them all in neatly with ſlender oſier twigs, &c. See *Eſpalier Trees.*

Gathering the Apples, &c.

Apples arrive to perfection for uſe, in different varieties, from July or Auguſt, until the end of October or beginning of November: the Summer and earlier Autumn kinds, attaining maturity in Auguſt and September, fit for

for uſe, immediately off the tree, and do not keep long, eſpecially the earlier kinds, but the Winter Apples, which do not attain full growth till October, aforeſaid, being then properly gathered, keep good many months and improve in perfection as they lie in the fruitery.

But all the late Autumn and Winter Apples, particularly, ſhould be permitted to have their full growth on the tree till October, ſome to the beginning and middle, others till towards the latter end of the month, if the weather continues mild and dry.

To know when the Apples are arrived to maturity on the trees, ſhould try if

if they quit their hold eaſily on being turned gently up; or that they naturally drop from the tree in any great abundance; or ſome ſorts by changing colour and emitting a fragrant ſmell; at which tokens of perfection they ſhould be gathered, both Summer and Winter kinds.

They ſhould generally be gathered in dry weather; and all thoſe intended for long keeping ſhould be gathered carefully, by hand, without bruiſing, carrying them directly into the fruit room, &c. diſpoſed in heaps, each ſort ſeparately, to remain a week or two to ſweat and diſcharge the watery juices; then wiped dry, and put up in the different diviſions and ſhelves of the fruitery,

fruitery, and in boxes, or hampers, &c. and then cover the whole closely with clean dry straw, a foot thick, to exclude the moist air as much as possible, whereby they will keep much longer in perfection.

Generally keep the door and windows closely shut, for the less the external air is admitted, the better the Apples will keep.

The APRICOT TREE.

THE Apricot is one of the moſt excellent ſtone fruits, a ſpecies of the *Prunus*, or *Plum-tree*, but formerly ranked as a diſtinct genus, by the title of *Armeniaca*: however, the characters of its flowers and fruit, agreeing exactly with the *Prunus*, the Botaniſts have ranged it as a ſpecies of that genus, and are both of the claſs and order *Icoſandria Monogynia*, flowers having many ſtamina and one ſtyle."

There is but one ſpecies of the Apricot tree, compriſing eight or nine excellent

cellent varieties of the fruit, and is named by the Botaniſts,

Prunus Armeniaca, i. e. ARMENIACA, or the APRICOT TREE, — ſpecifically deſcribed *Prunus with nearly heart-ſhaped leaves and flowers*; having five petals, *ſitting almoſt cloſe to the branches*, ſucceeded by large, roundiſh, yellow, pulpy fruit, including a ſtone or nut,— and comprehends the following varieties, ripening in ſucceſſive order, from the beginning or middle of July, until the end of Auguſt.

EARLY WHITE MASCULINE APRICOT. *Middle of July.*

EARLY RED MASCULINE APRICOT. *Middle and end of July.*

ORANGE APRICOT. *Beginning and middle of Auguſt.*

ALGIERS APRICOT. *Early in Auguſt.*

ROMAN APRICOT. *Beginning and middle of Auguſt.*

TURKEY APRICOT. *Middle of Auguſt.*

TEMPLE APRICOT. *Middle of Auguſt.*

BREDA APRICOT. *Middle and end of Auguſt.*

BRUSSELS APRICOT. *Middle and end of Auguſt.*

The firſt two ſorts are ſmall fruit, valued for their early pefection; and the ſucceeding ones are a much larger, handſome fruit, greatly ſuperior in flavour, and conſequently more valuable to cultivate for the main ſupply; generally planting all the ſorts againſt walls; though

though the two laſt ſorts, which are the lateſt, but moſt excellent Apricots, firm and rich flavoured, will alſo ſucceed in Eſpaliers and detached ſtandards; however, all the ſorts are valuable Summer fruit for different domeſtic uſes, *viz.* When young and green, before the ſtone grows hard, are moſt excellent for tarts, &c. when ripe and gathered, whilſt they remain firm, before they become ſoft and mealy, are the fineſt table fruits of the Seaſon, and when fully ripe, may be converted to an excellent ſweetmeat, being preſerved in ſugar.

The trees generally require training as wall-trees, in this country, againſt a warm wall, in order both to protect

their early tender bloſſom more effectually from the attacks of the Spring froſts and cutting blaſts, to enſure a more certain and plentiful crops of fruit, and alſo to improve its growth, and obtain it in the greateſt perfection.

Though ſome of the late ſorts ſucceed tolerably well, trained in eſpaliers, alſo in detached half and full ſtandards, as aforeſaid.

The Apricot tree grows fifteen or twenty feet high with a ſpreading head, ornamented with large heart ſhaped leaves, and numerous reddiſh flowers of five petals; producing the flowers and fruit principally upon the young-

wood

wood of a year old, immediately from the eyes of the ſhoots, and often upon ſmall ſpurs on the two or three years wood; but moſtly upon the young ſhoots of the former years growth, ſo that a general annual ſupply of each years ſhoots muſt be every where reſerved, as ſucceſſion bearing wood.

They bloſſom early in Spring, Febuary and March; and the fruit ſets in great abundance in favourable Springs: often affording plentiful ſupply for thinning off for tarts in May, &c. and the remainder ripens in July and Auguſt.

The trees are hardy enough; but as they bloſſom and ſet their fruit early in

in the Spring, often whilſt ſharp froſts and cutting blaſt prevail, they require the indulgence of a warm Sunny ſituation, and aſſiſtance of a wall, to defend the tender bloom and infant fruit as much as poſſible from the rigours of the weather; ſo that the trees for the general ſupply ſhould be planted againſt a warm wall or cloſe paling fence, &c. ſome earlier kinds againſt a ſouth aſpect, and others on weſt and eaſt expoſures, to effect a greater variation in the times ripening of the fruit, as well as to obtain it longer in perfection; and thus we may employ all the ſorts, not only as common dwarf wall trees, planted fifteen or twenty feet diſtance; but alſo half ſtandards planted between them, trained alſo as wall trees to

make

make the moſt of every part of the walls, &c. as hereafter directed.

But, as before hinted, ſome may alſo be employed both as eſpalier trees, and as detached ſtandards in open expoſures, to take their chance and encreaſe the variety; and for this purpoſe, the *Breda* and *Bruſſels Apricots*, not bloſſoming ſo early as the others, are generally the moſt ſucceſsful, and often ripen in good perfection, and with peculiar richneſs of flavour.

All the varieties of this tree, ſucceed well in any common good ſoil of a garden, or if of a moderate loamy temperature, either wholly or part, may prove an additional advantage; however

ver any common ſoil capable of producing good crops of herbage, &c. is eligible.

Method of Propagation, &c.

The propagation of the Apricot tree, being originally from the ſtones of the fruit, the approved varieties ſo obtained are encreaſed, and continued the ſame by budding them upon any kind of Plum ſtocks.

Raiſe the ſtocks for this purpoſe, from the ſtones of any ſort of plum, ſowed in Autumn too inches deep, and when the ſeedling plants are a year old, proceed to plant them out, previouſly ſhortening their down right tap roots

roots, then plant them in rows a yard aſunder, and near half that diſtance in the lines; and in two years, when about two or three feet high, they will be proper to bud for common dwarf wall or eſpaliers trees; but for half and full ſtandards, they may either be run up to ſtems from four or five, to ſix or ſeven feet high, and budded at top, or trained only the height as for the dwarf trees, to be budded low, and the firſt ſhoot trained to a ſtem the above height.

Then the budding is to be performed in July or Auguſt, procuring cuttings of the young ſhoots of the year, detatched from the beſt bearing trees, from which to take the buds:

inſerting one bud in each ſtock within half a foot of the bottom for common wall or eſpalier trees, and at three or four feet for half, and ſix for full ſtandards, or as low in the ſtock as for the dwarfs, and the firſt ſhoot from the bud trained up for a ſtem, as we formerly obſerved; and having thus performed the budding, the buds remaining dormant till the following Spring, when having headed down the ſtocks a little above the place of inoculation, each bud will ſoon after puſh forth one ſtrong ſhoot growing a yard or more long by the end of Summer, forming the new trees with good large heads; then in the Autumn, Winter or Spring following, the trees may be tranſplanted finally into the garden if required; or

may

may remain in the nurſery and trained for the purpoſes intended.

Obſerving, in either caſe, that in March following, juſt as the young trees begin to puſh, the whole head or firſt main ſhoot from the budding muſt be ſhortened or headed down clean with the knife to ſix or eight inches, to provide ſeveral lateral ſhoots below the enſuing Summer, to form the head regularly from the bottom, training them horizontally at full lentgh till Winter, (See *their General Culture.*)

Likewiſe, the firſt head of the ſtandards, that were budded at the top of the ſtem, ſhould alſo be headed down in the above manner, to force out lower

branches near the place of inoculation, in order to form a more regular ſpreading head.

But ſuch ſtandards that were budded near the ground, muſt have the firſt ſhoot run up entire to a proper height for a ſtem, then cut over with the knife, at the height required, to have branches emitted to give the head its firſt form.

Whilſt the young trees remain in the nurſery, thoſe deſigned for walls, both dwarfs and half ſtandards, ſhould have their branches trained accordingly, either as they remain in the nurſery lines, by being trained horizontally to ſtakes, or being previouſly planted againſt

againſt reed hedges, walls, or any cloſe fence, training the branches thereto, being careful to retrench all fore-right ſhoots, and very rank wood, by rubbing them off early in Summer, and train in all the regular branches at full length till Winter pruning, when they muſt be ſhortened more or leſs, as directed in their *General Culture.*

For as Apricot trees bear principally on the young wood, the ſhortening that of each year in Winter pruning is neceſſary, in order to force out a regular ſupply of ſhoots more certainly in the proper places, as ſucceſſion bearers; for the ſame ſhoots both produce fruit and ſucceſſion wood at the ſame time,

Planting

Planting them in the Garden, &c.

When the young Apricot trees are from one to three or four years old, they are of a proper age for planting in the Garden; though if only one year old, with their firſt heads from the Budding entire, they are rather the moſt eligible; but they may alſo be tranſplanted with good ſucceſs when ſeveral years old, and may be had in the nurſeries of ſome years training, and in a ſtate of bearing, which, by the nurſery-men, are called *trained trees*, and which are eligible for perſons who are in haſte to have their walls covered as ſoon as poſſible with bearing trees, as they bear the following ſeaſon after planting.

The

The ſeaſon for planting theſe trees in general, is any time, in open weather, from the end of October till Spring, as for other hardy trees,

At the proper ſeaſon, having fixed on their allotted ſituations; ſome againſt a South wall, others on Weſt and Eaſt aſpects, as we before noticed, proceed to prepare and dig the borders; if for a general plantation, obſerving, if a poor, or very light, hungry ſoil, add a quantity of good dung, to be trenched in, or a ſupply of freſh loam, or a compoſt of any good earth and dung together, the whole digged in one or two ſpades deep.

Then having digged up the trees carefully

fully in the Nurſery, prune off only any broken or damaged parts of the root, leaving their heads entire for the preſent, and proceed to plant them along the wall, in the uſual method, not leſs than fifteen or ſixteen feet aſunder; but if eighteen or twenty feet diſtance the better, eſpecially if low walls, that in default of height they may have room to extend the branches horizontally; and if tolerably high walls may plant a half-ſtandard in each ſpace between the dwarfs, and trained like them alſo as wall trees, that whilſt the former occupy the lower parts, the ſtandards cover the upper part of the wall: as ſoon as planted, throw down a pot of water to each tree, if dry ground, eſpecially in Autumn or Spring planting, both to

ſettle

ſettle the earth about the roots, and to facilitate their rooting afreſh, then nail their heads to the wall, and manage them in general as directed below.

Eſpalier Apricots ſhould be planted at the ſame diſtances as directed above, for thoſe againſt the walls.

And the ſtandard Apricots ſhould be allowed ſome ſheltered, ſunny ſituation in the open borders, or quarters of the kitchen garden, or in the compartments of the pleaſure ground, or on graſs lawns, &c.

General Culture of Pruning and Training, &c.

The trees being planted where they

are to remain, and if but one year old, with their firſt head from the budding entire; then, in March following, cut them wholly down to five or ſix eyes, as directed in the nurſery, to promote ſeveral lateral branches below, to form the head regularly quite from the bottom, as before mentioned; but if they were previouſly headed in the nurſery, and obtained a proper ſupply of bottom branches to form the head regularly, they need not now be cut ſo ſhort, only to eight, ten, or twelve inches, and nailed regularly and horizontally to the wall, about four or five inches aſunder.

Then obſerving in both caſes, that as the trees thus ſhortened will ſoon after ſhoot out ſtrongly from all the remaining

ing eyes of each ſhoot, ſome regular, and others irregular, we muſt carefully retain all the regular-placed ſide ſhoots, and early in May or June rub off all fore-right and other irregular wood, and very rank luxuriant growths; and, when long enough, train in all the regular ſhoots cloſe to the wall or eſpalier at full length all the Summer: and then in the Winter pruning, any time from November till Febuary, it is proper to ſhorten each of the laſt Summer's ſhoots to ten or twelve inches more or leſs, according to their ſtrength, leaving the lowermoſt ſhoots rather the longeſt, then nail them along horizontally to the wall, equally to the right and left on both ſides, five or ſix inches diſtance; and thus each horizontal will

emit a farther ſupply of branches the following Summer, ſtill being careful to diſplace fore-right and other irregular wood, riſing in front and back of the branches, as ſoon in the ſeaſon as poſſible, and train the reſt at full length all Summer as before adviſed, unleſs it ſhall ſeem eligible to ſtop or pinch ſhort any particular ſhoots in a vacant part in May or early in June, to force out a proper ſupply of laterals the ſame year, to fill the vacancy as ſoon as poſſible; training them in at full length, as directed for the others, till Winter pruning, when they muſt be ſhortened and trained as before; and thus the trees will aſſume a bearing ſtate when two or three years old.

In

In this manner proceed increaſing the number of regular-placed branches, annually arranging equally both ways nearly in a horizontal direction, four or five inches aſſunder one after another, till by degrees they cover the wall or eſpalier regularly, from the very bottom to top, conſtantly retrenching all fore-right, very luxurious, and ſuperabundant ſhoots; both in Summer and Winter pruning, cutting then quite cloſe: being at the ſame time careful, to retain every Summer a plentiful ſupply of the well-placed young wood in every part for ſucceſſion bearers the following year, trained moſtly at full length all Summer as aforeſaid, and in the Winter pruning, if too numerous, thin out the worſt placed of the

the ſuperabundancy; and ſhorten the remaining regular ſhoots, to from about eight, ten, or twelve inches to half a yard or two feet long or more, leaving the ſtrong ſhoots longeſt in proportion: and then nail the whole cloſe and regular to the wall at the above mentioned diſtance. See *their General Pruning.*

Thus, it muſt be obſerved, that as we adviſed the ſucceſſion young wood to be trained at full length all Summer till Winter pruning, and then ſhortened: the ſhortening the ſhoots in the Winter pruning, of theſe and moſt other trees which bear principally on the young wood, is neceſſary, in order to promote lateral ſhoots in Summer,

mer, from the lower eyes for next years Bearers, which, if the ſhoots were laid in at full length, would ariſe only towards the extreme parts, and leave the tree naked of bearers below.

For the beſt bearing ſhoots riſe principally on the year old wood, that was trained the Winter before; the ſame ſhoots both produce the fruit and a ſupply of ſucceſſion wood for next years bearers.

Their General Pruning, &c.

As Apricot trees, trained againſt wall, and eſpaliers, annually ſend forth many ſuperfluous and irregular ſhoots as well as uſeful wood, they require

require a general Summer and Winter pruning to retrench the uſeleſs growth, and to train in the requiſite annual ſupply of regular young wood for ſucceſſion bearers.

The ſummer pruning conſiſts in regulating the ſhoots of the year only, retrenching the bad and train in the uſeful, and ſhould be begun in May if poſſible, or while the ſuperabundant and irregular ſhoots of the year are ſo young and tender as to be readily diſplaced with the thumb, or at leaſt, before the ſhoots in general advance any conſiderable length, and cauſe confuſion and diſorder: keeping in mind in this pruning, always to reſerve an abundant ſupply of the ſame years well-placed ſide ſhoots

ſhoots in every part, trebly more than what may be apparently wanted, not leſs than two or three on each of the preſent bearers or horizontals, trained in laſt Winter, in order to have plenty to chuſe from in the Winter pruning for next years bearing: but leave no where more than one ſhoot from the ſame eye; thus obſerving to retrench only all the evidently ſuperfluous young wood, ill-placed and very luxuriant ſhoots as ſoon as poſſible, pruning them all quite cloſe, or in vacant parts, pinch ſome to a few eyes; and having carefully retained plenty of the beſt regular ſide ſhoots in every part, and always ſome good ſhoots advancing from below, train the whole at full length till Winter

pruning; being careful to review the trees frequntly after this during the growing ſeaſon, to retrench all after ſhoots, and reform caſual irregularities and to continue the whole cloſe and regular to the wall all Summer.

The Winter pruning of Apricots, conſiſting of general regulation among both the young and the old branches, may be performed any time from the end of October or November, until February or beginning of March, before the bloſſom buds are too much advanced; previouſly unnailing moſt of the principal branches and ſhoots, that you may more readily examine the work, and have liberty to uſe your knife properly, as well as have an opportunity of training the

branches,

branches, agreeable to the regulation of the general pruning.

Then proceeding to the pruning, examine the general ſupply of young wood of laſt Summer, ſelecting a ſufficiency of the moſt promiſing and regular-placed of them in every part, for next ſummer's bearers; one or two, at leaſt, on each, retaining the horizontals trained in laſt Winter, and cut out cloſe all the ſuperfluous ones before deſcribed, and all ſmall twigs, likewiſe part of moſt of the former year's bearers, and any very naked branches, unfurniſhed with young wood, pruning them down to ſome eligible lateral branch, or young ſhoots, to make room to train the requiſite ſupply of young wood with due regularity, cutting off cloſe any lateral twigs ariſ-

ing on the ſelected young ſhoots, which, as you go on, muſt be moſtly ſhortened, more or leſs, for the reaſons before explained, and as below,

For example, the ſmaller ſhoots cut to ſix, eight, or ten inches in length, the middling growths to a foot or fifteen inches, and the ſtrongeſt ſhoots to half a yard or two feet long; for the ſtrong or vigorous ſhoots muſt not be cut ſhort, which would force out luxurious barren wood; being careful in ſhortening not to cut below all the fruit-buds, diſtinguiſhed by their turgid, ſwelling appearance, from the wood buds, which are long and thin, cutting generally either juſt above a wood bud aforeſaid, or to a double fruit bud, on twin bloſſom,

in

in order to obtain a leading ſhoot between, at the extremity next Summer, to draw nouriſhment to the fruit more effectually.

As you alſo proceed in the pruning, be careful to preſerve all the eligible ſmall fruit-ſpars aforementioned, riſing on the two or three year's wood.

But cut out cloſe all conſiderable projecting old ſpurs, all dead wood and old ſtumps.

As ſoon as any tree is pruned, let it be directly nailed again to the wall with due regularity, arranging all the branches horizontally as before, four or five inches aſunder, ſtraight and cloſe in the neateſt manner:

Protecting

Protecting the Bloſſom, and thinning the Fruit.

As Apricot trees bloſſom early in the Spring, and are often attacked by cutting froſts, and cold blaſts, greatly injuring the embryo fruit, if not occaſionally ſheltered, it is therefore adviſeable to afford the beſt kinds againſt walls ſome protection at that period, either of garden mats nailed up before the trees occaſionally, or cuttings of any kind of leafy ever-green ſtock between the branches, to remain till the fruit is fairly ſet, or paſt danger.

Sometimes Apricot trees ſet more abundant crops of fruit than they can nouriſh,

nouriſh, in which caſe it is proper to thin out the redundancy regularly, when about the ſize of ſmall cherries or gooſeberries, leaving not more than two or three on the ſmaller ſhoots, three or four on the larger, and ſo in proportion.

And thoſe fruit thinned off muſt not be thrown away, they being moſt valuable as the firſt green fruit of the ſeaſon, for making tarts, &c.

Culture of the Standard Apricots.

As to ſtandard Apricots, they, like moſt other ſtandard fruit trees, want but little attendance in reſpect to pruning, or any other culture, for after being headed down the firſt year, and thereby procured

procured a regular ſet of ſeveral branches near the top of the ſtem, to form a ſpreading head; let them afterwards generally branch out, and extend in length every way, according to nature, except juſt reducing any long rambler, very irregular, or crowded branches, and dead wood, which may be performed any time in Winter,—leaving the general regular branches and ſhoots wholly entire, and they will naturally afford plenty of young bearing wood, as well as fruit ſpurs, and in favourable ſeaſons will produce good crops of very fine Apricots.

The BERBERRY TREE,

OR,

PEPPERIDGE BUSH.

THE Berberry is of the ſhrub kind, and held in eſteem both as a fruit ſhrub for its berries, and as an ornamental ſhrub for adorning the ſhrubbery, is an inhabitant of many of our woods and hedges, but has been long admitted a reſident of gardens, it producing numerous bunches of beautiful red berries, in much eſtimation as a domeſtic fruit to pickle, &c. and effects a beautiful variety as they grow on the trees, which belong to the bota-

nic claſs and order *Hexandria Monogynia*, flowers having ſix ſtamina and one ſtyle.

There is but one ſpecies cultivated as a fruit ſhrub, and the Botaniſts call it,

Berberis Vulgaris, COMMON BERBERRY-TREE deſcribed, *Berberis having each flower-ſtalk ſuſtaining a racemous bunch of flowers*; ſucceeded by cluſters of ſmall, bright-red oblong berries, containing two ſtony ſeeds, and compriſes the following varieties ripe in Autumn, *viz.*

1. Common Red Berberry with ſtony ſeeds.
2. Red Berberry without ſtone.
3. White Berberry.
4. Black ſweet Berberry.

But

But the firſt two varieties, being the red fruited kinds, are the principal ſorts for our purpoſe, and the ſtoneleſs ſort is in moſt eſteem for general uſe, particularly for pickling: the berries of theſe two varieties being of a beautiful red colour when fully ripe, and of an agreeable acid reliſh, are in much eſtimation as a choice and very wholſome pickle: and the bunches of fruit are in great demand as an ornamental garniſh to diſhes when ſerved up to table, ſo that a few trees of each of the red ſorts ſhould be admitted into every good garden, as ſtandards, to produce fruit for the above purpoſes.

The Berberry ſhrub is but of moderate growth, riſing only about

ten, or twelve feet high, armed with thorns, and garniſhed with ſmall oval leaves and looſe bunches of yellow flowers of ſix petals: producing the flowers and fruit on the ſides of the young branches.

All the varieties are very hardy, and will proſper any where in the garden, or orchard, and ſhrubberry.

When deſigned as fruit ſhrubs, they ſhould be generally trained as half or full ſtandards, each with a ſingle ſtem, four, five, or ſix feet high, then encouraged to branch out at that height, and form a regular head: and being arranged ſingly in the garden or orchard &c. fifteen or twenty feet aſunder,

they

they will produce a plentiful crop of berries fit for uſe in September and October.

Method of Propagation, and Training.

They are propagated by ſuckers, layers, and by ſeed, but the ſuckers and layers are the moſt certain methods to continue the varieties diſtinct, and more certainly the layers.

By SUCKERS. The ſhrubs ſend up ſuckers abundantly from the root, which dig up in Autumn, &c. with as much roots as poſſible, and plant them in nurſery rows a yard aſunder, and trained with ſingle ſtems, pruning off all ſide ſhoots till arrived to four, five, or

or ſix feet height, then may either top them with the knife to force out ſhoots near together at the top of the ſtem, to form a ſpreading head, or permit them to run up and aſpire more in height.

By Layers.—Chuſe the young branches of laſt Summer, and in Autumn or Winter, &c. lay them down in the earth three inches deep with the tops out in an erect poſition; and by next Autumn they will be rooted, then cut them from the parent plant, and ſet them out in rows, and managed as the ſuckers.

By Seed. Sow the ripe berries in Autumn in drills an inch or more deep, they

they will probably moſt of them remain till the ſecond Spring before they come up, giving water in Summer, and when the ſeedlings are a year old, plant out the ſtrongeſt in nurſery rows and train them for ſtandards, as above adviſed.

Tranſplanting into the Garden, and Culture.

When the Berberry-ſhrubs are four or five feet high or more, they may be planted out finally any time from November till March; ſome in the garden, others in the orchard, four or five yards aſunder; ſome alſo in the ſhrubbery, &c.

As to culture, very little is wanted, let them branch out freely at top nearly

in

in their own way, only cutting out caſual rank ſhoots, very irregular and crowding branches, or reduce long ramblers, all ſhoots from the ſtem, and ſuckers from the root, ſuffering all the regular branches to remain entire, and they will naturally form themſelves into plentiful bearers.

The BULLACE-TREE,

OR

WILD PLUM.

THE Bullace-tree is a ſpecies of the *Prunus* or Plum-tree, grows wild in our woods and hedges, but is often admitted into curious orchards and gardens as a fruit tree, to increaſe the the variety of late ſtone fruits for the deſert, &c. it producing a ſmall ſtone fruit of the Plum kind, which, when fully ripe, eats with an agreeable acid flavour, and is accounted very wholeſome; and the tree being of the *Prunus* tribe, it belongs to the *Icoſan-*

dria monogynia; flowers having twenty or more ſtamina and one ſtyle.

There is but one ſpecies of the Bullace-tree, furniſhing ſome varieties, and its ſpecific name is

Prunus inſititia. The BULLACE-TREE. And is ſpecifically deſcribed. *Prunus with ſpinous branches, oval leaves, hairy underneath, and with the flower-ſtalks, &c. moſtly in pairs*; ſucceeded by ſmall round Plum-like fruit, conſiſting of a ſoft ſour pulp; including a ſtone in the centre; and comprehend the following varieties; ripening in October, *viz*:

1. Common

1. Common Black Bullace,
2. White Bullace,
3. Red Bullace,

This fruit being an inferior ſort of late Plum, of a ſharp acid flavour, merits culture for its late ripening, after all the other ſorts, and if fully ripe, eats with an agreeable tart reliſh, affording a variety among other fruits, both as they grow on the trees, and in the deſert at table; and for making tarts, pies, &c. and for preſerving, &c.

The Bullace Tree grows twelve or fifteen feet high or more, having thorny branches, oval leaves, and flowers with five petals; producing the flowers and fruit, both from the eyes of the young

wood, and on ſmall ſpurs from the ſides and ends of the older branches.

They flower profuſely in April and May, and the fruit ripens the end of September and in October.

The trees are exceedingly hardy, and a few of each ſort, propagated and trained as ſtandards, are worthy of culture; for the variety of thier fruit, diſtributed anywhere in the garden or orchard, either as full or half ſtandards, dwarf ſtandards, &c.

Method of Propagating and Training.

This tree may be raiſed abundantly from the ſtones of the fruit; but the permanency of the different varieties,

is continued only by grafting or budding them upon any kind of Plum or Bullace Stocks; and by which they will alſo bear ſooner, and the fruit will be larger.

By Seed or ſtones of the fruit,—Having a quantity of the ripe Bullaces in Autumn, ſow the ſtones of them in beds of common earth, two inches deep, and when the ſeedling plants are one or two years old, plant them out in lines two or three feet aſunder, and train each with a ſingle ſtem, three or four feet for half, and ſix for full ſtandards, then permitted to branch out into full heads.

By Grafting and Budding, By either of theſe two methods, any of the varieties

varieties may be continued diſtinct, by inſerting grafts, or buds of them into Plum or Bullace Stocks, raiſed from the ſtones of the fruit, as juſt above directed for the ſeedling Bullaces, and planted out in nurſery lines a yard aſunder, to be trained up to the proper height either for half, or full ſtandards, or dwarfs; are thus to be grafted or budded according to the general method, with grafts or buds of the different varieties, and afterwards trained as other ſtandard trees, ſuch as Apples, Plums, &c. with full branchy heads. (*See Apple Tree, &c.*)

Planting and General Culture.

When the trees, raiſed by any of the above methods, have formed heads, conſiſting

conſiſting of ſeveral branches, they are proper for final tranſplantation, where they are to remain, planted any time from November to March, eighteen or twenty feet aſunder.

And as to culture as ſtandards, they require very little, ſuffering them generally to branch in their own way of growth, except occaſionally to reform with your knife, &c. any croſs-placed and very crowded branches, and all dead wood. Permitting all the proper branches to extend in their own natural manner, and they will afford abundant annual crops of Bullaces.

The CHERRY TREE.

THE Cherry Tree *(Ceraſus)* is famous for producing the earlieſt ripe fruit, of any other kind of fruit tree, attaining perfection at a ſeaſon when they prove exceedingly acceptable and refreſhing, both for the deſert and many culinary purpoſes; is by the modern Botaniſts, conſidered as a ſpecies of the *Prunus* or Plum-tree; though was long diſtinguiſhed as a ſeparate *genus* by the title of *Ceraſus*; and belongs to the claſs *Icoſandria* and order *Monogynia*, flowers having twenty or more ſtamina, and but one ſtyle.

There are two ſpecies of the Cherry cultivated as fruit-trees, viz. *Common Cherry-*

Cherry-tree, and the wild black and red Cherry; diſtinguiſhed by the Botaniſts as follow:

Prunus Ceraſus, i. e. CERASUS, or COMMON CHERRY-TREE, — deſcribed *Prunus with oval-ſpear-ſhaped ſmooth leaves: and with the flowers growing in umbels ſitting almoſt cloſe*,—ſucceeded by cluſters of large Cherries, having a ſoft juicy acid pulp, with a ſtone or nut in the centre: and conſiſts of the following varieties, ripening from May till Auguſt, *viz.*

KENTISH, or COMMON CHERRY. *End of June and July.*

EARLY MAY CHERRY (Small.) *May and beginning of June*,

COMMON MAY DUKE CHERRY. *End of May, and in June.*

ARCH DUKE CHERRY, *End of June and July.*

WHITE HEART CHERRY. *June and July.*

RED HEART CHERRY. *June and July.*

BLACK HEART CHERRY. *End of June, and in July.*

AMBER HEART CHERRY. *July and August.*

BLEEDING HEART CHERRY. *Middle or end of July.*

OX-HEART CHERRY. *Middle and end of July.*

LUKEWARD CHERRY. *End of July.*

HERTFORDSHIRE HEART CHERRY. *July and August.*

HARRISON

HARRISON DUKE CHERRY. *July.*
CARNATION CHERRY. *End of July.*
CROWN HEART CHERRY. *July.*
MORELLO CHERRY. *Auguſt and September*

The above catalogue compriſes the principal varieties of the common Cherry, known and cultivated in the public nurſeries, by the names here annexed; and of which, the beſt bearers are, the Kentiſh, all the Dukes, the Lukeward, Hertfordſhire and Morello; but moſt of the Heart Cherries being ſtrong growers, generally bear more ſparingly than the other varieties.

Second Species.

2. *Prunus Avium. The Bird's Cherry,* or WILD CHERRY TREE, — *Having*

oval ſpear-ſhaped leaves, downy underneath, and with the flowers in cloſe-ſitting umbels; ſucceeded by ſmall round Cherries of a bitteriſh flavour, comprehending the following varieties, ripening in the end of July, and in Auguſt.

COMMON SMALL BLACK WILD CHERRY.

COROUN, OR LARGE BLACK WILD CHERRY,

SMALL RED WILD CHERRY,

LARGER RED WILD CHERRY,

This ſecond ſpecies of *Wild Cherry*, grows wild in woods, and hedges in England, *&c.* and is often admitted into gardens and orchards, for the variety of its fruit, which effects an agreeable ſucceſſion;

ceſſion; and by many, much admired for its peculiar bitteriſh reliſh: But the Coroun being the largeſt, and fineſt fruit, is ſuperior for general culture.

The two ſpecies of Cherry-trees differ in growth and magnitude: The common or garden Cherry, grows only about fifteen or twenty feet high, and the ſecond forty or fifty, with a more erect and lofty head; adorned each with ſpear-ſhaped leaves, and numerous cluſters of white, four-leaved flowers, in April and May, ſucceeded by the Cherries ripening, in the different varieties, from May till Auguſt, or September.

Their mode of bearing is both on the

the young year-old wood, immediately from the eyes of the ſhoots, and on the older branches, principally upon ſhort ſpurs iſſuing, firſt towards the extreme parts, then gradually along the ſides; the ſame wood continuing fruitful ſeveral years, only wanting a renewal of young occaſionally, as any branch becomes very old and barren; nor muſt the ſhoots or branches be ſhortened in the courſe of pruning, as it would deſtroy the firſt bearing parts, and promote much lateral wood, and but few fruit ſpurs.

Though the early May, and the Morello Cherries particularly, generally bear the moſt abundantly on the young wood, and ſhould always retain

a more

a more plentiful ſupply of each year's ſhoots, as ſucceſſion bearers.

All the ſorts of Cherry-trees ſucceed equally well, trained both as wall-trees, eſpaliers, and as full and half ſtandards, and occaſionally as dwarf ſtandards, for variety, and for forcing; and are all very hardy, proſper in any common fertile ſoil, and open expoſure, in a garden, or orchard, &c. Plant the wall and eſpalier-trees fifteen or twenty, and the ſtandard thirty feet diſtance.

As the common Cherry-tree produces the largeſt and fineſt fruit, we ſhould cultivate principally the ſeveral varieties thereof for the general ſupply, both for wall, eſpalier, and ſtandard trees; chuſing as wall and eſpalier-

trees,

trees, ſome of the early May, but more plentifully of the Dukes and other large kinds; ſome for South walls, for the early ſupply in May and June, others on Weſt and Eaſt walls for ſucceeding crops, and ſome alſo on North walls, to continue the ſucceſſion till Auguſt and September; but the Morello is the moſt commonly aſſigned to the northern aſpects, though it highly deſerves a ſoutherly expoſition to improve its flavour; and for ſtandards, may plant any of the ſorts, though ſhould generally allot a good ſhare of the Kentiſh, Dukes, Lukeward, and Hertfordſhire Cherry, Black and White Hearts, and ſome Morello Cherries.

But

But the Wild Cherry in its different varieties, muſt not be omitted in the collection, trained principally as ſtandards, in the garden and orchard; but the ſmall black and red kinds, are alſo often planted, to adorn avenues and parks, and arranged in hedge-rows around the boundaries of fields, &c.

Method of Propagation.

Cherry-trees are propagated by grafting or budding ſhoots and buds of the deſireable varieties upon ſtocks, either of the Wild Cherry, as being the hardieſt and ſtrongeſt grower, or on any kind of Cherry ſtock the moſt eaſily obtained; raiſed from the ſtones

of the Cherries, as directed for the Apricot, &c.

Performing the grafting in Spring, and the budding in Summer, near the ground, for wall and other dwarf trees, and at ſeveral feet height for ſtandards; the grafts will ſhoot the ſame year, and the buds in ſpring following, each forming their firſt heads by the enſuing autumn, when the young trees may either be tranſplanted into the garden, or remain longer in the nurſery, training them, in either caſe, for the purpoſes intended, as directed for the Almonds, Apples, and Apricots.

Final Planting, and Culture, &c.

All ſorts of Cherry-trees may be planted where they are to remain, either

either when only one year old, with their firſt heads entire, or from two or three, to five or ſix years growth, any time from November till March; previouſly when digged up, prune away broken parts of the root, and any ill-placed ſhoot of the head, leaving all the reſt entire; then plant the wall and eſpalier-trees, fifteen or twenty feet diſtance, and the ſtandards thirty, or more, if for a full plantation.—

Then in reſpect to general garden culture, take the following hints—And

Firſt of the wall and eſpalier Cherries,—that if new-planted, one year-old trees, having their firſt ſhoots entire, head them down in March to a few eyes, to promote lower bran-

 ches;

ches; but if headed in the nurſery, and furniſhed with ſeveral branches below, train them to the wall, &c. moſtly at full length, arranging horizontally to both ſides, four or five inches aſunder; and in Summer, may pinch ſhort young ſhoots of the year, to procure a further ſupply of horizontals; and thus continue encreaſing the branches annually, to cover the wall regularly upwards; being careful to rub or prune off all fore-rights, and other irregular growths, and ſuperabundant ſhoots, training the regular ſupply ſtrait, and cloſe to the wall and eſpalier at the above diſtances, always at full length, as far as they have room: And they will thus naturally emit

emit numerous fruit ſpurs, and bear abundantly in two or three years.—

And, as to general pruning, &c. continue the ſame branches as long as they remain fruitful, pruned, as below, Summer and Winter.—Always commence the Summer pruning in May or June, to diſplace all uſeleſs growths of the year, ſuch as all fore-right growers, and all apparently ſuperfluous or unneceſſary ſhoots, retaining a ſupply of well-placed lateral ones till Winter pruning, training them in at full length.—And in the Winter pruning, examining the main branches or general bearers, if any worn out, naked, or dead ones appear, cut them out, and retain young wood in their place; at the ſame time ſelect occaſional well-placed

placed laſt Summer's ſhoots in vacancies, advancing for bearers, and a terminating one to each main horizontal, and cut out cloſe all the ſuperabundancies, being careful to preſerve all the fruit ſpurs in every part; then as ſoon as pruned, nail in all the branches regularly as before, four or five inches aſunder at full length, as formerly adviſed.—

Culture of the Standard-Cherries.

As to the culture of the Standard Cherry, that being trained to the proper form in the nurſery, as directed for Apples, &c. and thence planted out fully where their heads have full ſcope to grow, they afterwards require very little pruning, only occaſionally in Winter,

Winter, to regulate any very crowded, and irregular branches, and cut out dead and cankered wood; but otherwiſe permit the general branches to proceed in their natural growth, as they will ſoon furniſh numerous fruit-buds their whole length.

The CHESNUT-TREE.

THE Cheſnut (*Caſtanea*) is a lofty tree, a ſpecies of the *Fagus* or Beech, but formerly a diſtinct genus by the title of *Caſtanea*, is of the nut-bearing kind, and cultivated occaſionally as a Standard fruit-tree, for variety in orchards, avenues, Parks, Lawns, and out-grounds, &c. belongs to the claſs and order *Monoecia Polyandria*, i. e. male and female flowers on the ſame plant, and the males having many ſtamina, and the females three ſtyles.—

There is but one ſpecies of the Cheſnut-Tree, called by the Botaniſts,

Fagus

Fagus Caſtanea, i. e. CASTANEA, or the CHESNUT-TREE deſcribed, *Fagus, with ſpear-ſhaped ſawed leaves, naked underneath*; and with flowers produced in long Catkins, ſucceeded by large prickly capſules, containing two or more nuts, conſiſting of the following varieties, ripening in September; *viz.*

MANURED, or LARGE SPANISH CHESNUT,
WILD or SMALLER CHESNUT.

The fruit of the Cheſnut-tree, though not ſo valuable as many other ſorts, forms a variety in Autumn, and Winter; and is by many much eſteemed for roaſting, in which it eats very tender and palatable.

The Chefnut-tree grows forty or fifty feet high, branching widely round, forming a regular head, ornamented with large elegant lanceolate leaves, and fmall flowers, without petals, collected in amentums, or ftrings, at the fides of the younger branches; the females becoming large round prickly Capfules, incloſing the chefnuts, arriving to maturity in Autumn.

It is a hardy tree, grows freely in any common foil, and open expofure; and merits admittance in our fruit-tree collection, efpecially in extenfive grounds, trained as full ftandards, to plant on the boundaries of orchards, or in parks and avenues, arranged in concert with Walnuts, &c. thirty or forty feet, or

more

more diſtant—in which, when advanced to a tolerable large growth, they will bear abundance of Cheſnuts, ſometimes little inferior to thoſe we receive annually from Spain and Portugal, &c.

Method of Propagation.

This tree may be raiſed abundantly from the nuts, and occaſionally by grafting, to continue the manured ſort diſtinct.

By the Nuts,—Procure a quantity of well-ripened, plump, ſound cheſnuts, Engliſh or foreign growth, in Autumn or Winter, from the Seedſmen or Orange merchants, and preſerve them in ſand till February, then planted in drills two or three inches deep, they will come up in ſix or eight weeks;

and when one or two years old, plant them out in nurſery rows, a yard aſunder, and here train them with ſtrait clean ſtems, ſix or ſeven feet high for full ſtandards, pruning of all laterals below, and leave the leading ſhoot entire, permiting them to branch out at the above height, and form full heads, only juſt retrench any very irregular or rambling growth at firſt, to preſerve a little regularity.

By Grafting.—By this method of propagation we can more certainly continue the manured, or large Cheſnut permanent, ingrafting ſhoots thereof into Cheſnut-ſtocks, raiſed from the nuts as above, and trained up to high ſtandards, as directed for the ſeedling Cheſnuts.

When

When the trees raiſed by either of the above methods, are ſix, ſeven, or eight feet high, may plant them out finally, where they are to remain, in the places and diſtances before-mentioned.

And as to future culture, let them branch out moſtly in their own way, except retrenching occaſionally any very croſs-placed and rambling growths.

CURRANT-

The CURRANT TREE.

THE Currant Tree *(Ribes)* is of the ſhrub and berry-bearing kind, and the moſt valuable of our fruit-bearing ſhrubs, for the uſefulneſs of its fruit, which proves cooling and refreſhing to eat in the heat of Summer, and excellent for various culinary purpoſes; and by the rules of botany, comprehends the Gooſeberry as a ſpecies of the ſame family *(See Gooſeberry.)* and belongs to the Claſs and order *Pentandria Monogynia*, flowers having five ſtamina and one ſtyle.

There are two ſpecies, and are deſcribed by the Botaniſts, as below.

Ribes

Ribes Rubrum, Red Currant-Tree. *Having branches without thorns, and plain flowers in ſmooth pendulous cluſters:* Succeeded by hanging bunches of red and white berries, in the different varieties; ripening in June and July, *viz*:

Common Red Currant
Large Dutch Currant
Long-Bunched Red Currant
Champagne Large Pale-Red Currant
White Currant
Large White Dutch Currant

Ribes Nigra, Black Currant-Tree.—Having *thornleſs branches, and oblong flowers in hairy cluſters*; Succeeded by looſe bunches of larger black berries of

of a rank flavour, compriſing but one uſeful variety, ripening in July, *viz.*

Common Black Currant.

Theſe ſhrubs grow ſix or ſeven feet high, dividing low into many branches, forming buſhy heads, adorned with trilobated leave and ſtrings of ſmall greeniſh flowers, of five petals; ſucceeded by the bunches of berries; attaining perfection from June and July, till September; and their order of bearing is both on the young and old wood; often immediately from the eyes of the young ſhoots, but more plentifully upon a ſort of ſpurs or ſnags ariſing on the ſides of the older branches: and the ſame wood continues fruitful ſeveral years.

The

The Red and White Currants are the moſt eligible for general culture, both as deſert fruit to eat, and for many uſeful domeſtic purpoſes; ſo that great plenty of the buſhes ſhould be admitted into every garden.

But the Black Currant is more in eſtimation for medical uſes than for eating; but is very wholeſome, and ſhould be admitted in the collection, in moderate quantity.

All the ſorts of Currant buſhes are trained both as common buſhy ſtandards, with ſtems a foot, or half a yard high, branching out above into buſhy heads, to arrange in the open quarters of the kitchen garden for the general

plantations; and occaſionally as flat or fanned ſtandards to range eſpalier-ways in narrow borders, &c. likewiſe in fanned dwarfs againſt walls and eſpaliers, to obtain the fruit in greater perfection and earlier and later in the ſeaſon, by having them in different expoſitions.

Method of Propagating and firſt Training.

All the ſorts of Currant buſhes are moſt eaſily and expeditiouſly propagated in abundance, both by Suckers, cuttings, and Layers, and raiſed to a bearing ſtate in two years.

By Suckers—They ſend up Suckers abundantly from the root every Summer, com-

commencing proper plants by Autumn; when, or in Winter or Spring, dig them up with as much root as poſſible, and prune off long, weak, or crooked tops, to twelve, fifteen or eighteen inches length; then plant them in nurſery rows, or the tall ſtrong Suckers at once where they are to remain; training the Standard buſhes with ſingle ſtems, by trimming off all lateral ſhoots a foot or half a yard high, then permitted to branch out at top, and form regular heads, keeping the branches five or ſix inches aſunder, not ſhortening the ſhoots, (excepting any long rambler,) til lthe head is arrived to the intended height; obſerving, the heads may either be permitted to grow convexly or

full in the middle, or concave or hollow, by pruning out the central branches, ſo as to diſpoſe the outward ones circularly around at regular diſtances.

Others may be encouraged to branch out near the ground in order to be trained in a fanned manner, both for fanned ſtandards, and for walls and eſpaliers, by cutting away all projecting ſhoots, and retaining only ſuch as arrange the way of the row, eſpalier-ways.

By Cuttings—chuſe cuttings of the ſtrong young ſhoots in Autumn, Winter or Spring, from ten or twelve inches to half a yard long or more, and plant them with a dibble, in any ſhady border,

in

in rows a foot aſunder, each one third into the ground, training them as directs for the Suckers.

By Layers,—In Autumn or Winter &c. lay down any of the lower branches, three inches deep in the earth, with the tops out, they will root freely, and in Autumn following plant them out in rows, and managed as the Suckers.

Final Planting &c.

Currant-trees from two, to three or four feet high, having tolerable branchy heads, are of a proper ſize to plant out for good; performing it any time from November till March.

Planting

Planting the different ſtandard buſhes, ſome in ſingle ranges around the large quarters of the kitchen garden, eight feet in the row, others croſs ways; the ſame diſtance, to divide large plats of ground into breaks or compartments, thirty or forty feet wide or more; and may likewiſe arrange ſome in continued plantations, ſix feet in the rows, and eight or ten between the ranges:

And for wall and eſpaliers, plant a few againſt ſouth walls, &c. for early Currants, and a larger ſupply on weſt and eaſt expoſures, and plenty on north walls, for general later crops; and ſome in eſpaliers, &c. arranging them ten feet diſtance, and their branches trained either horizontally or aſcending, as con-

venient;

venient, or as room permits, five or ſix inches aſunder, moſtly entire, till extended to their limited bounds.

General Culture.

With regard to general culture, let the common Standard Currants be generally continued with ſingle ſtems, by clearing away all lateral ſhoots below, and ſuckers from the roots; and the head kept regular, either convex or full in the middle, or concave or hollow, as formerly explained, with the branches kept five or ſix inches diſtance, retaining the ſame branches ſeveral years as bearers.

In Summer, if numerous ſhoots ariſe, may go over them with your knife, and trim

trim out close the most irregular and crowding, to admit the Sun to the fruit; reserving a moderate supply of regular ones at full length till Winter.

And in Winter, the bushes will require a more general regulation: that, if the last Summer's shoots remain too abundant, prune out close all the superfluous and irregular, reserving only some occasional regular shoots, advancing in casual vacant parts below, or to supply the places of bad or dead wood, and a terminating shoot to every branch, or when advanced too long, prune it down to such a shoot, or to a lower branch, having one for its leader; likewise now retrench any casual irregular branch, worn out bearer, and decayed wood,

wood, long rambler, or very crowding growths, pruned either to their origin, or down to any more eligible branch or young ſhoot; carefully preſerving all the natural fruit-ſpurs and bearing ſnags, and cutting out decayed ones: and then, may either ſhorten the upper leading ſhoots, more or leſs, to continue the head of a moderate ſtature, if required, or permit them to remain moſtly entire, and aſpire to their natural height and extent, if not limited to room.

Culture againſt Walls and Eſpaliers, &c.

As to the fanned Currants againſt walls and eſpaliers, &c. continue the branches trained four or five inches

aſunder, either horizontally, or aſcending, as room admits, extended moſtly entire, till advanced to the extent of their utmoſt limits.

In Summer prune out all projecting fore-right, very irregular, and ſuperfluous ſhoots; and train in only ſome regular ſide and main leading ſhoots entire, till Winter.

Then, in Winter pruning, ſelect occaſionally ſome well-placed young ſhoots in vacancies below, advancing to a bearing ſtate, and, according as worn-out or decayed branches occur, they ſhould now be pruned down to ſome lower young wood: all young ſhoots, not now wanted, muſt be cut out cloſe,

pre-

preſerving all the bearing ſpurs, and cutting out decayed ſtumps; then either training in the branches entire, where there is room enough to extend them, or in default thereof, ſhortening the ſhoots, more or leſs, as the Caſe requires;

Of the Fruit.

To preſerve Currants long in perfection: in July or Auguſt cover ſome of the buſhes both in ſtandards, and againſt walls, &c. with mats and nets, to ſhade them from the Sun, and defend them from the birds, whereby a ſucceſſion of good Currants may be continued from June or July, until October, both for the fruit deſert, and culinary preparations.

The ELDER-BERRY-TREE.

THE Elder-tree *(Sambucus)* is of the berry-bearing kind, and merits a place in the fruit-tree collection, for the ſake of the berries, for making that excellent cordial liquor, called Elder Wine, which is its chief value as a fruit tree, the raw berries being very unpalatable to eat; and belongs to the Claſs and Order *Pentandria Trigynia*, flowers with five ſtamina and three ſtyles or ſtigmas.

There is but one ſpecies of Elder proper for the fruit-tree collection, *viz.*

Sambucus

Sambucus Nigra, BLACK *or* COMMON ELDER-TREE — Deſcribed, *Sambucus, with a tree-like ſtem, and cymoſe, five-parted umbels of flowers*, ſucceeded by large umbellate cluſters of black, and other coloured berries, in the different varieties, ripening in Autumn, *viz.*

COMMON BLACK-BERRIED-ELDER,
WHITE-BERRIED-ELDER.

The Elder-tree grows twenty or thirty feet high, with a ſpreading head, garniſhed with winged leaves of two or three pair of lobes, terminated by an odd one, and large broad umbellate cluſters of ſmall-white, five-parted flowers, in Summer, at the end of the branches,

branches, ſucceeded by large bunches of ſmall black berries, ripe in September.

It is the common black-berried Elder we principally recommend as a fruit-tree, for its berries to make wine, and for which the trees demand a place in our collection, trained generally as common ſtandards, or ſome occaſionally in rough hedges; eſpecially as they will grow freely in any ſoil and ſituation, in out grounds; ſuch as the verges of orchards, &c. hedge-rows, ſides of banks, or ditches of water, or any waſte premiſes, obſcure corners, or moiſt ſituations; either in detached ſtandards, or in continued hedges; and will produce abundant crops of berries annually, well worth our notice for the purpoſe aforeſaid.

Method

Method of Propagation, &c.

This tree is eaſily raiſed from cuttings of the young ſhoots, and occaſionally by ſeed.

By Cuttings.—In Autumn, Winter, or Spring, cut off a quantity of the beſt ripened robuſt ſhoots of laſt Summer, in lengths from half a yard to five or ſix feet, and planted, either at once where they are to remain, or in nurſery rows, a yard aſunder, introducing each cutting near two thirds, or almoſt half way, (the longer ones) into the ground, with a long dibble, or with a ſtake or iron crow for the longeſt ſets; and, as they advance in growth, train thoſe deſigned for ſtandards

ſtandards with clean ſingle ſtems, five or ſix feet high, then let them branch out with full heads; and permit the hedge plants to grow rough nearly from the bottom, only trimming up the ſides little, and rambling ſhoots.

By Seed.—In Autumn procure a quantity of the ripe berries, and ſow them any where in drills an inch deep, and when the plants are a year old, plant them out, and train them as above.

Planting and Culture.

As we before obſerved, may either plant large cuttings at once where they are to remain, or young trees previouſly raiſed,

raiſed, as above in the nurſery, from four or five, to ſix feet high.

Plant the ſtandards fifteen or twenty feet diſtance; ſuffer them to branch out above, and form full and ſpreading heads, according to their natural growth.

The hedge plants, deſigned to form a full hedge, chiefly for the berries, may be arranged about a yard aſunder; and, in their future growth, only trim up the lower ſtragglers on the ſides, and let them branch out freely above.

The FIG-TREE.

THE Fig-tree *(Ficus)* is famed for its ſingularly rich and delicious fruit: though, on account of its peculiar luſcious flavour, it is not ſo generally palated as many other ſorts; however, being an eminently fine fruit, the trees deſerve culture in every good garden, principally as wall trees, and occaſionally as eſpaliers and ſtandards; of which there are many choice varieties, originating from one main ſpecies, belonging to the claſs and order *Polygamia Polyoecia*, i. e. flowers being of different ſexes, on the ſame, and on different plants.

There

There is only one ſpecies of the cultivated Fig, compriſing ſeveral varieties; *viz.*

Ficus Carica, i.e. CARICA, or COMMON FIG-TREE. — *Having large palmated or hand-ſhaped leaves*, and numerous minute flowers, concealed within a general cup or cover, becoming the fruit, pear or top-ſhaped, ripening in Autumn, to different colours, in the varieties; *viz.*

EARLY LONG BLUE or PURPLE FIG. *Beginning of Auguſt.*

LARGE BLUE FIG. *Auguſt and September.*

LARGE BROWN or CHESNUT FIG. *Beginning of Auguſt.*

EARLY WHITE FIG. *July and Auguſt.*

BLACK ISCHIA FIG. *Middle of Auguſt.*

SMALL BROWN ISCHIA FIG. *Auguſt and September.*

GREEN ISCHIA FIG. *End of Auguſt.*

LARGE WHITE GENOA FIG. *Auguſt.*

BROWN MALTA FIG. *Auguſt and September.*

BLACK GENOA FIG. *Auguſt.*

LONG BROWN NAPLES FIG. *September.*

ROUND BROWN NAPLES FIG. *End of Auguſt.*

BROWN MADONNA or BRUNSWIC FIG. *Auguſt and September.*

The Fig-tree grows fifteen or twenty feet high, making ſtrong ſucculent green ſhoots, garniſhed with large leaves, divided more or leſs into five lobes;

lobes; producing the flowers and fruit always on the young wood of the former year's growth, arising in Spring, immediately from the eyes of the shoots, like small buds, each forming a sort of general cup to numerous small florets or flowers within, gradually encreasing in size till August and September, then ripening with a soft, tender, delicious pulp; and as the trees bear only on the young year old shoots, a general annual supply thereof must be retained in every part, as succession bearers, and which, as they bear mostly towards the upper parts, must not be shortened.

The fruit buds arise, both in the Spring, on the former year's wood, and in Summer and Autumn on shoots of the

the year; but it is from the Spring production we are to expect the main crops; for although the Summer and Autumn Figs attain perfection as ſecondary crops the ſame year, in warm countries abroad, they do not attain maturity in England in the open air: ſo they ſhould be generally rubbed off as uſeleſs the beginning of Winter.

The trees ſucceed in any common ſoil of a garden, but their tender ſhoots are liable to be killed in ſevere Winters, in open expoſures.

They ſhould therefore, generally be cultivated principally as wall trees, in a ſheltered ſunny ſituation, both to defend the tender ſhoots in Winter, and promote

promote the ripening of the fruit in greater perfection; allotting the principal part for ſouth walls; ſome alſo on weſt and eaſt walls, for ſucceſſion crops, planted twenty feet diſtance, and their branches arranged horizontally, ſix or eight inches aſunder, retaining a full ſupply of each year's ſhoots, as before noticed, for the main bearers, trained always at full length.

They alſo often ſucceed well in eſpaliers, in a ſunny expoſure, and bear plentiful crops, managed as thoſe againſt walls.

Likewiſe as half and full ſtandards, planted in a ſheltered ſunny ſituation; in favourable warm dry ſeaſons they often produce

produce tolerable crops of very good Figs.

Method of Propagation &c.

The Fig is propagated by ſuckers, layers, and cuttings.

By Suckers.—Many ſuckers ariſe from the root, which, in Autumn or Spring, dig up and plant, either the ſtrongeſt at once, when they are to remain, eſpecially as wall and eſpalier trees, or in nurſery rows for training; obſerving, in either caſe, to train them as required; if as dwarfs, for walls, &c. head them in Spring to eight or ten inches, to obtain lateral branches; and for ſtandards, train them with ſtems from three

three to ſix feet high, then top them, and let them branch out into full heads.

By Layers.—Chuſe the lower pliable young branches and ſhoots in Autumn or Spring, and lay them in the ground five or ſix inches deep, with the tops out; they will be rooted, and fit to plant off next Autumn: managing them as the Suckers.

By Cuttings.—Cut off a quantity of the young robuſt ſhoots in Autumn or Spring, from ten to fifteen inches long, and plant them with their tops entire, in a ſhady border, in rows two feet aſunder, trained as the Suckers.

Final Planting.

As the Fig-Tree generally ſucceeds beſt when planted out finally while young, may plant as wall and eſpalier trees, either the Suckers, Layers, or Cuttings, as ſoon as rooted, at once where they are to remain, or ſuch as have been previouſly trained, two or three years, and formed a head of branches; but for ſtandards, ſhould chuſe for final planting ſuch as are trained with tall erect ſtems a proper height, and have branched out at top, and formed heads.

Plant them in Autumn or Spring, the wall and eſpalier-trees twenty feet diſtance

diſtance at leaſt, for the branches, being trained horizontally, will ſoon fill that ſpace; and the ſtandard trees ſhould alſo be arranged twenty or thirty feet aſunder, eſpecially the full ſtandards.

General Culture.

Then as to culture of pruning and training, obſerve as below.

Firſt, of the wall and eſpalier trees; theſe being furniſhed with a head of lateral branches, obtained as directed in their nurſery culture, let all the branches be trained horizontally to the wall, &c. ranging equally to both ſides at full length, ſix or ſeven inches aſunder, continuing to encreaſe the the number of branches annually upward,

ward, arranged at the above diſtance; and, if wood is wanted, may either prune ſhort ſome adjacent ſhoot in Spring, or pinch ſhoots of the year, in May or June, to force out laterals, but otherwiſe generally train the whole ſupply of bearers always at full length.

Every Summer, about June, July, and Auguſt, go over the trees, both wall and eſpaliers, and cut out only directly fore-right, and other very irregular ſhoots of the year, or ſuch as appear abſolutely uſeleſs, or cannot be trained in, carefully reſerving all the regular ſide ſhoots, and tacking them in ſtrait and cloſe, at all their length, to admit the ſun and air to improve the fruit; leaving an abundant ſupply to chuſe from in Winter pruning for next year's bearers,

bearers, not ſhortening any during their Summer's growth.

The Winter, or general pruning, may be performed either in November or Spring; though as the ſhoots of Fig-trees are very liable to ſuffer by ſevere froſts, if left unpruned till February or March, there will be a greater chance out of the whole, to have a ſufficiency ſurvive the rigours of the Winter, to chuſe from in Spring pruning.

Then, in the operation of Winter pruning, muſt retrench old naked wood, and retain a full ſupply of young ſhoots for next year's bearers, obſerving, where old naked branches, unfurniſhed with

with young wood, advance a conſiderable length, to prune them out either wholly, or down to ſome lateral ſhoots, &c. to ſupply the place: ſelecting a general reſerve of the beſt-placed ſhoots, not only collaterals or ſide ſhoots, ariſing on all the main branches at eligible diſtances, advancing in progreſſive order, one after another, between the mother horizontals, from the very bottom to the extremities, but alſo a terminating one to each branch, and as the foremoſt branches advance too long, the laterals come up to ſupply their places; retaining generally the moſt robuſt ſhort-jointed ſhoots, rejecting very long, weak, and ill-ripened ones; cutting out, as you go on, all the ſuperabundant and uſeleſs young growths quite cloſe, together with all

all dead wood, and part of any too long-advanced older branches, cut down to a lower ſhoot; preſerving the whole ſupply of bearers at full length; then directly nail and tye them regularly to the wall and eſpalier, ſtrait and cloſe at the aforementioned diſtances.

As to the Standard Figs, let them branch out freely at top, and only cut out in Spring any very irregular growths, and the ends of dead ſhoots, leaving all the others entire, permitting the whole to branch out, and form a full head.

The

The GOOSEBERRY-BUSH.

THE Gooſeberry (*Groſſularia*) is ranged by the Botaniſts as a ſpecie of *Ribes* or Currant, according to the agreement of their fructification or parts of the flowers, and are alſo of the Claſs and order, *Pentandria Monogynia*, flowers having five ſtamina and one ſtyle.

There are ſeveral ſpecies of Gooſeberries, compriſing many varieties; and are diſtinguiſhed by the Botaniſts as follow:

Ribes Groſſularia, i. e. *Groſſularia*, or COMMON GOOSEBERRY. *Having prickly erect*

erect branches, and *hairy berries*.

Ribes reclinatum. RECLINATED GOOSEBERRY-BUSH. *Having ſomewhat reclining branches, but moderately armed with prickles.*

Ribes Uva-Criſpa.—or (UVA-CRISPA) SMOOTH-FRUITED-GOOSEBERRY BUSH, *Having erect prickly branches, and ſmooth berries.*

Ribes Oxyacanhoides — HAW-LEAVED GOOSEBERRY-BUSH. Having very prickly branches, and large leaves.

Of the above ſpecies there are many different varieties of the fruit; ſome are round, others oval, and of different colours, as Red, Green, Yellow, White; ſome hairy, and ſome ſmooth; generally known by the following names:

Red Kinds.

Small Early Black-red Gooseberry.
Hairy Red Gooseberry.
Smooth Red Gooseberry.
Damson, or dark Red Gooseberry.
Red Raspberry Gooseberry.
Great Mogul Tawney Gooseberry.

Green Kinds..

Early Green hairy Gooseberry.
Smooth Green Gooseberry.
Green Gascoigne Gooseberry.
Green Raspberry Gooseberry.

Yellow Kinds.

Early Amber Gooseberry.
Great Oval Yellow Gooseberry.

GREAT ROUND AMBER GOOSEBERRY.
HAIRY AMBER GOOSEBERRY.

White Kinds.

COMMON WHITE or CRYSTAL GOOSEBERY.
GREAT CRYSTAL GOOSEBERRY.
WHITE VEINED GOOSEBERRY.

Different Colours.

GREAT RUMBULLION GOOSEBERRY.
LARGE IRONMONGER GOOSEBERRY.
SMOOTH IRONMONGER GOOSEBERRY.
GREAT HAIRY GLOBE GOOSEBERRY.

The buſhes grow ſix or ſeven feet high, branching out low into very buſhy heads, armed more or leſs with thorns,

and have trilobated leaves, and ſmall greeniſh flowers at the ſides of the branches, ſucceeded by the berries, attaining a uſeful ſtate in May or June, to uſe green for culinary purpoſes, and ripe for eating in June, July, and Auguſt.

They bear both on the young and old wood, immediately from the eyes of the young ſhoots, and on ſmall ſpurs, ariſing on the two, or three, and many year old branches.

As the Gooſeberry is a very uſeful Summer fruit, both when green for many culinary purpoſes, and when ripe very palatable and wholeſome to eat, every good garden ſhould be well furniſhed with

plenty of the buſhes, cultivated generally as buſhy ſtandards, in the kitchen garden, &c. both in ſingle rows, and in full plantations, from ſix to eight or ten feet diſtance in each row; trained commonly with ſingle ſtems a foot or more high, branching out above with regular heads, which muſt be kept in order by cutting out ill-placed and crowding ſhoots, retaining the general regular branches, ſix or eight inches aſunder; formed either with the heads full in the middle, or concave, or hollow, by retrenching the central ſhoots, as obſerved in the Currants; leaving the ſhoots moſtly entire, or but moderately ſhortened; at leaſt till arrived to the intended height. *See their Training and Culture.*

Some

Some may alſo be trained with fanned heads, eſpalier ways, and alſo to plant againſt walls, &c. for early fruit.

Propagation and Training.

Gooſeberries are expeditiouſly raiſed in abundance from ſuckers and cuttings, and occaſionally by layers, to a bearing ſtate in two years.

By Suckers.——Abundance ariſe annually from the roots of old trees, which may be dug up in Winter or Spring. Chuſe the ſtrongeſt, and prune the crooked and weak tops a little, then plant them in nurſery rows for training; or ſome of the ſtrongeſt at once where they are to remain; and in their future growth trim off all lower ſhoots from

from the ſtem, and irregular ones in the head, keeping the general branches ſix or eight inches aſunder, as before obſerved, only ſhortening long ſtragglers, &c. and they will bear the ſecond year.

By CUTTINGS.—Chuſe ſtrong, ſtraight young ſhoots, of the upper branches, cut off a foot or more long; plant them in rows, in a ſhady border, and they will readily grow; training them as the ſuckers.

By LAYERS.—Lay the lower branches almoſt at any time, and any how, in the earth; they will root freely, and be fit to plant off in Autumn after; training them as above.

Final Planting and Culture.

Gooſeberry buſhes, when advanced two or three feet in height, with tolera-

ble

ble bushy heads, may be planted out finally to remain, any time from October till March.

Plant the main supply in the large quarters of the kitchen garden; some arranged in a single row, around the verges or borders, eight or ten feet asunder, others in wide cross rows, to divide the ground, and some in continued plantations, six or eight feet in the lines, with an interval of ten feet between the rows, as advised for the Currants.

May likewise plant a few fanned trees against warm walls, to produce some early fruit.

Then, as to future management, it is nearly

nearly the ſame as directed for Currants, obſerving alſo as below.

Keep the buſhes always to one ſingle ſtem below, by clearing off all lower ſhoots, and ſuckers from the root. The head ſhould be kept open, and regular, and the general branches continued about ſix or ſeven inches aſunder, to have large fruit; and ſhortened but little, or hardly at all, in pruning, except very long ramblers, or low ſtragglers; retain the ſame branches as bearers, as long as they ſupport a good bearing ſtate, becauſe thoſe of ſeveral years old bear abundantly on ſpurs; but according as they gradually become very old or worn out, and produce but ſmall fruit, ſhould retain ſtrong young ſhoots, advancing below, to ſupply their place, according to the following rules of general pruning.

As theſe buſhes generally emit numerous ſhoots every Summer, you may, if any are very crowded, in June or July, prune out cloſe ſome of the moſt irregular and crowding, to open the head, for the more free admiſſion of the ſun and air, to promote the ſize and goodneſs of the fruit; retaining enough of the regular ſhoots entire to chuſe from in Winter pruning, if required.—And in Winter pruning, proceed to prune out cloſe all the ſuperabundant lateral ſhoots of laſt Summer, together with any very crowded, irregular, older wood, and old worn-out bearers; retaining young ones advancing below in their room, and leaving the general branches about ſix or eight inches diſtance, at leaſt, as before obſerved; each terminating in a young

ſhoot;

ſhoot, either naturally; or if any branches are advanced too long or ſtraggling, prune them down to a lower ſhoot for a leader; preſerving all the ſmall lateral fruit ſpurs; and let the occaſional ſupply of young ſhoots be but moderately ſhortened; principally only long rambling growths, and very bending and ſtraggling ſhoots, juſt reduced to a little regularity, as obſerved for the Currants.—The buſhes will thus ſhoot moderately, and produce larger and finer fruit in proportion.

For if Gooſeberries are too generally ſhortened, it forces out numerous unneceſſary, uſeleſs ſhoots, from all the lower eyes, in Summer, forming the head a perfect thicket, rendering the fruit ſmall, and occaſioning much trouble of pruning in Winter.

Never prune them with garden ſhears, as ſometimes ignorantly practiſed; but always with a knife: Likewiſe, always keep the branches of the head thin, and you will have large handſome berries, ripening with a good flavour.

FIL-

The HAZEL and FILBERT-NUT-TREE, &c.

THE Hazel *(Corylus)* compriſes the common Wood Nut, the Filbert, Barcelona, Cob Nuts, &c. all varieties of one ſpecies, which merit culture in the fruit collection, for the variety of their fruit; and belong to the claſs and order *Monoecia Polyandria*, flowers male and female on the ſame tree; the males having numerous ſtamina.

The Hazel conſiſts of one ſpecies, compriſing ſeveral varieties.

Corylus Avellana, i. e. *Avellana*, or COMMON HAZEL-NUT-TREE, having round leaves, with *oval obtuſe ſtipula*, at the

the baſe; male flowers in long catkins, and female flowers cloſe to the branches, ſucceeded by the nuts, in large torn cups, conſiſting of the following varieties, ripe in Autumn; viz.

COMMON WOOD NUT, with white, and with red ſkinned kernels.
LARGE CLUSTER WOOD NUT.
FILBERT NUT, with red kernels.
FILBERT NUT, with white kernels.
BARCELONA NUT.
COB NUT, (very large).
LONG NUT, (a curioſity).

The Hazel tree, and varieties, grow from about twelve or fifteen, to twenty feet high; very branchy, almoſt to the bottom, having roundiſh rough leaves, and

and produces the flowers and fruit from the ſides of the branches, being male and female, flowers ſeparate, without petals; the males in long yellowiſh amentums, in Winter, and the females in cloſe-ſitting cluſters, in the Spring, ſucceeded by the cluſters of Nuts, incloſed each in its torn calix or cup, ripening in Auguſt and September.

The Common Wood Nut Trees grow in vaſt abundance in our woods and hedges, and are ſometimes admitted in Gardens, &c. for variety.

But the other larger ſorts, being improved varieties, are cultivated more abundantly in gardens and orchards, but the Filbert moſt of all, for the goodneſs

of

of its kernel; though the large Cluſter and Barcelona Nuts are alſo well worth cultivating, and the Cob and Long Nut as ſingular varieties: but where there is good ſcope of ground it is worth attention to cultivate ſome of each ſort in gardens, orchards, and fields, &c. as they will ſucceed almoſt any where.

They may be employed both as full and half ſtandards; planted either in continued ranges, fifteen or twenty feet aſunder, or dropped ſingly in different parts to effect variety, keeping them to clean ſtems, and let the heads branch in their natural manner.

Some may likewiſe be arranged hedge ways,

ways, five feet diſtant in the row, and ſuffered to take their natural growth.

And, for variety, ſome may be planted in eſpaliers, eſpecially the Filberts, arranged fifteen feet aſunder, with the branches trained at full length, retaining occaſional lateral ſhoots, advancing below as ſucceſſion bearers. They are all very hardy, and will ſucceed in any common ſoil and expoſure.

Method of Propagation and Training.

All the varieties of the Hazel-tree are propagated both by planting the Nuts, and by ſuckers, layers, and grafting; but it is proper to remark, that as the ſeedling-raiſed plants are apt to vary, the

latter methods are the moſt certain, whereby to continue the improved varieties diſtinct.

By the Nuts.——Let a quantity of the beſt Nuts of the deſired ſorts be preſerved in ſand till February, then ſowed in drills two inches deep, and when the plants are a year or two old, plant them out in nurſery lines, training ſome as full, half, and dwarf ſtandards, with ſix, four, and two feet ſtems; then top them, and permit them to branch out above, and form heads; ſome alſo as hedge plants, branching out near the bottom, but fanned up on the ſides.

By Suckers.—The trees ſend up abundance from the root; which being dug

dug up in Winter, or Spring, may either plant the ſtrongeſt at once, to remain, eſpecially if for hedge-rows, or wholly in the nurſery way, to train for the purpoſes intended.

By Layers.—Any time from Autumn till Spring, in open weather, have recourſe to ſome low branching trees, chuſing ſome of the lower pliable branches, furniſhed with plenty of young ſhoots: peg them down, and lay all the young wood three or four inches deep, with the tops out, which by next Autumn will be rooted; then plant them out, and train them as the ſeedlings.

By Grafting.—This may be practiſed to continue and improve any parti-

cular fine variety, by inſerting ſhoots thereof into any kind of Hazel ſtocks, in the common method of grafting.

Planting and Culture.

When the trees are advanced from about four to five or ſix feet high, they may be planted out to remain; arranging the ſtandards, ſome in full plantations, others dropped ſingly in borders, ſhrubbery clumps, or on the ſides of ſhady walks, &c. and others in hedge-rows, as aforeſaid.

In Culture, keep the ſtandards to clean ſingle ſtems, and let the heads branch out in their own way, only reforming caſual long ramblers, or low ſtragglers;--And in the hedge plants, trim up only low ſtraggling branches, and let them branch out above at ſides and top.

The MEDLAR TREE.

THE Medlar Tree (*Meſpilus*) is ſingular in its production of a large apple and pear-ſhaped brown fruit, not eatable until it aſſumes a ſtate of decay; for while it remains firm and ſound it is exceedingly auſtere; but ripening in Autumn, becomes ſoft and palatable in Winter; the tree belongs to the claſs and order *Icoſandria pentandria*: Twenty or more ſtamina, and five ſtyles, in each flower.

There is but one ſpecies of the common Medlar, which, by the Botaniſts, is called

Meſpilus Germanica,—GERMAN, or *Com-*

mon

mon Medlar Tree ; deſcribed *Medlar, with ſmooth or thornleſs branches, ſpear-ſhaped leaves, downy underneath, and large ſolitary, or ſingle-placed, cloſe-ſitting flowers*, ſucceeded by large, round, umbilicated, brown, hard fruit, the ſize of middling apples, each containing five ſtoney ſeeds, ripening in October and November, but not eatable till after being gathered and lain ſome time, when it becomes ſoft, tender, and palatable, of a ſharp, vinous flavour, and compriſes the following principal varieties, viz.

COMMON LARGE GERMAN MEDLAR.
NOTTINGHAM, or SMALLER MEDLAR.
PEAR-SHAPED ITALIAN MEDLAR.

The Medlar-Tree grows deformedly, twelve or fifteen feet high, or more, ornamented

namented with large lanceolate leaves; and produces its flowers and fruit ſingly, from the ſides of the two or three, and many year old branches, often upon ſhort ſpurs; the ſame branches continue bearing many years, and ſhould generally be permitted to run without ſhortening, except reducing caſual ſtragglers, &c.

This tree certainly merits admittance in every collection, for the ſingularity and variety of its fruit; trained principally as ſtandards and half ſtandards, in the garden and orchard, or in any out grounds, for they will ſucceed any where; and ſome alſo, occaſionally, as Eſpaliers, in aſſemblage with quinces, apples, &c. managed as for apples and pears.

Method

Method of Propagation and Training.

The trees may be raiſed from ſeed; but by grafting and budding may preſerve the varieties permanent, and raiſe them ſooner to a bearing ſtate. Alſo by layers.

By SEED.——Sow the kernels of the fruit in a bed of light earth, an inch or more deep, in November or December; they will, probably, come up in Spring following, and, when a year or two old, plant them out in the nurſery way, and train them with from four to five or ſix feet ſtems, for half and full ſtandards; then let them branch out at top, and form heads; but thoſe deſigned for eſpaliers ſhould be topped in their infancy to ten or twelve inches,

inches, to provide lower branches, as directed for Apples, &c.

By GRAFTING, &c.—The improved varieties may be grafted or budded, either upon Medlar, Pear, Quince, or White-thorn Stocks, raiſed as above, for the ſeedling Medlars, ſeveral feet high for ſtandards, and lower in proportion for dwarfs; then let them be grafted or budded, and trained for the purpoſes intended, as directed for the Apple and Pear tree.

By LAYERS.—In Autumn, Winter, or Spring, lay the lower young branches in the common way, which will be rooted by Autumn following; then plant them off, and train them as the ſeedlings.

Planting and Culture.

When raiſed to a due ſize, plant the ſtandards any where in the garden, orchard, ſhrubbery, &c. twenty feet aſunder, and ſuffer them generally to grow in their own way, only pruning occaſionally any very irregular, rambling, and ſtraggling growths, as adviſed for other ſtandard fruit trees.

Plant the eſpaliers fifteen or eighteen feet aſunder, training the branches horizontally, five or ſix inches diſtance, moſtly at full length, to their allotted extent, except in their firſt training; when, if required, may prune ſhort occaſional young ſhoots in Spring or Summer, to encreaſe the number of branches to cover the eſpalier regularly; obſerving always to

give

give them a Summer and Winters pruning and training, exactly as directed for Apples and Pears.

Of the Fruit.

The Medlars attain full growth on the trees the end of October, or beginning of November, at which time let them be gathered, and prepared to an edible ſtate, by laying ſome in moiſt bran, others in dry ſtraw, and ſome on the ſhelves of the fruitery, &c. thoſe in the bran will become ſoft and eatable in two or three weeks, and the others will ſucceed them.

The MULBERRY TREE.

THE Mulberry Tree *(Morus)* is in high eſtimation for its fine juicy berries, very refreſhing to eat in the hot weather of Autumn, as well as for ſome culinary uſes, and makes a fine ſyrup; it is likewiſe eminent for its leaves to feed ſilk-worms, and belongs to the claſs and order *Monoecia tetrandria*, i. e. male and female flowers apart on the ſame tree, the males having four ſtamina.

There are ſeveral ſpecies of Mulberries; but there is only one ſort commonly cultivated as a fruit tree in England; viz.

Morus

Morus Nigra, BLACK or COMMON MULBERRY TREE, *having large heart-ſhaped rough leaves*, and ſmall male and female flowers, without petals; the males growing in amentums or ſtrings, and the females in roundiſh cloſe heads, which ſucceed to an ovaliſh, very ſucculent, blackiſh red berry, full of tuberances, each having one ſeed, and ripens in Auguſt and September; comprehending two varieties, viz.

COMMON BLACK MULBERRY.
JAGGED-LEAVED SMALLER MULBERRY.

The following ſpecies are alſo ſometimes cultivated for variety.

Morus Alba, WHITE MULBERRY.
Morus Rubra, RED MULBERRY.

But

But the Common Black Mulberry is the principal ſort to cultivate for the general ſupply.

The Mulberry tree grows twenty feet high, or more, dividing low into a large branchy, widely-ſpreading, full head; it produces its flowers and fruit on the young wood; very ſhort robuſt ſhoots of the ſame year ariſing from the ends of others produced the Summer before, towards the upper parts of the year-old branches; in which caſe they muſt generally be permitted to remain entire, as ſhortening would cut away the fruitful parts, and retard their bearing.

The trees are very hardy, and ſucceed in any common ſoil, trained both as common

mon ſtandards, half ſtandards, and dwarfs; and likewiſe as wall and eſpalier trees.

But common ſtandards is the moſt general mode of cultivating Mulberry trees, planted detached, either in the garden, orchard, or on lawns, or on any plat of graſs ground, in a warm, ſunny expoſition; though a few trees may be ſufficient for private uſe, as ſometimes one or two large ones furniſh berries enough to ſupply a numerous family.

May alſo cultivate ſome both as wall and eſpalier trees, for variety, and they will produce larger, earlier, and richer flavoured berries.

Method

Method of Propagation and Training.

The Mulberry tree is propagated by layers, cuttings, grafting, and occaſionally by ſeed.

By LAYERS.—Chuſe the young branches in Autumn or Spring; but unleſs they are ſituated low, or that there are ſtools previouſly formed, by heading down ſome young trees near the ground, to furniſh bottom ſhoots, commodious for laying, we muſt uſe large pots, boxes, or baſkets of earth, raiſed upon ſtands near the branches; laying the young ſhoots three inches deep, with their tops out; by next Autumn, being rooted, plant them off in nurſery-lines, and train them with

with clean ſtems, five or ſix feet high, for ſtandards, or in proportion for half ſtandards, &c. but when deſigned as dwarfs for walls or eſpaliers, they ſhould be headed while young to ten or twelve inches, to obtain lower branches, as formerly obſerved for other dwarf trees.

By CUTTINGS.—In Autumn or Spring cut off a quantity of laſt year's ſtrong ſhoots, from eight or ten, to twelve inches long, retaining their tops entire, and plant them in a ſhady border, to remain till Autumn or Spring following; then, the plants being rooted, ſet them out in the nurſery, to be trained like the layer-raiſed plants.

By GRAFTING.—This is ſometimes practiſed to continue and improve any

desirable variety, by inserting shoots thereof into stocks of the Mulberry kind.

By Seed.—Sow them in March, on a warm border, half an inch deep; and when the plants are a year or two old, bed them out in rows, and train them as above.

Planting and Culture.

Plant the standard Mulberries in any dry, sheltered, sunny exposure, either together, thirty feet distance, or detached in different places; and let them generally take their natural growth, retrenching casual dead wood, or any very ill-growing or low straggling branch; but never shorten the shoots, and they will then bear plentiful crops of berries annually.

Plant the wall and espalier Mulberries,

ries, fifteen or twenty feet diſtance, and arrange their branches horizontally, five or ſix inches aſunder, at full length, while the trees are young, only ſhortening occaſional middle ſhoots in Spring or Summer, to force out a farther ſupply of wood, to furniſh the wall and eſpalier more effectually; encourage alſo a ſucceſſion of regular ſide ſhoots, gradually advancing in every part, from the bottom upward, as bearers; and as any very old, long-advanced, naked branches appear, prune them down in Winter, and introduce lower, advancing young wood in their ſtead; training the whole ſtraight and cloſe to the wall and eſpalier, at full length, becauſe ſhortening the ends cuts away the only fruitful parts, as before remarked.

The NECTARINE TREE.

THE Nectarine tree (*Nuciperſica*) is of the family of *Amygdalus*, or Almond, and by the Botaniſts is conſidered generally as a variety of the Peach, as ſome have affirmed to have ſeen Peaches and Nectarines growing naturally on the ſame tree; and is of the claſs and order *Icoſandria monogynia*, twenty or more ſtamina, and one ſtyle, within the ſame flower.

The modern Botaniſts give the Nectarine no ſpecific diſtinction, only as a variety of the Peach, by the old name of *Nuciperſica*, the NECTARINE TREE, which, like the Peach, has *ſpear-ſhaped, acutely-*

ſawed

ſawed leaves, without glands at the baſe, which obtain in the Almond *cloſe-ſitting*, *ſolitary*, *or ſingly-placed flowers*, having *five reddiſh petals*, ſucceeded by a large, round, firm, ſmooth fruit, having a nut or ſtone in the centre; and conſiſts of ſeveral valuable varieties, ripening in Auguſt and September to a reddiſh and yellow colour; viz.

FAIRCHILD'S EARLY NECTARINE. *Middle of Auguſt.*

ELROUGE NECTARINE. *End of Auguſt.*

VIOLET NECTARINE. *Middle of Auguſt.*

NEWINGTON NECTARINE. *Beginning of September.*

TEMPLE NECTARINE. *Middle of September.*

RED ROMAN NECTARINE. *Middle of September.*

MURRY NECTARINE. *Beginning and middle of September.*

BRUGNON, or ITALIAN NECTARINE. *September.*

SCARLET NECTARINE. *Beginning and Middle of September.*

TAWNEY NECTARINE. *September.*

GOLDEN NECTARINE. *Middle or End of September.*

VIRMASH, or PETERBOROUGH NECTARINE. *October.*

All the varieties of Nectarines have a ſmooth rind, and firm rich pulp, which in ſome adheres to the ſtone, and in others it ſeparates.

The Nectarine tree grows in every reſpect like the Peach, not diſtinguiſhable one from

from the other but by the fruit; it riſes fifteen feet high or more, making long green ſhoots, garniſhed with long, narrow, ſpear-ſhaped leaves, and produces its flowers and fruit alſo on the young ſhoots of a year old, immediately from the eyes of the ſhoots; and, as the ſame ſhoots generally bear but one year, except on caſual ſpurs, a general ſupply of new ones of each year is requiſite in every part of the tree, annually, as ſucceſſion bearers, and which, in their training as wall trees, ſhould be retained at full length all Summer, and commonly pruned more or leſs in Winter, to promote a more certain ſucceſſion of new bearers from the lower eyes, as explained for Apricots and Peaches.

But although the Nectarine and Peach trees discover not the least difference in their general growth, yet there is a very obvious distinction in their fruit; the Nectarine having a smooth hard rind, while that of the Peach is downy and soft.

As the Nectarine tree blooms early in Spring, previous to the expansion of the leaves, and before the weather sets in warm, and, the young embryo fruit being tender, liable to suffer by the severity of the cold, should therefore, like the Apricot and Peach, be allowed a warm, sunny, exposure, against South, and West, and East walls, &c. trained both as common dwarf wall trees, for the general supply, and as half standards between the dwarfs, as observed for Apricots, &c.

It

It is a hardy tree in reſpect to growth, and ſucceeds in any good garden earth.

Method of Propagation and Training.

The Nectarine is propagated always by budding the approved varieties on Plum ſtocks, and occaſionally on Almond, Peach, and Apricots; but principally on plums, as being the hardieſt and moſt ſucceſsful ſtocks for the general ſupply, raiſed from the ſtones of the fruit, as directed in the culture of Almonds and Apricots, to a proper ſize to bud for dwarfs and half-ſtandards, performing the budding alſo as directed for thoſe trees, Peaches, &c.

The buds ſhooting forth in Spring following, and forming each one ſtrong

ſhoot, three or four feet long, by the end of Summer, the trees will then have formed their firſt head as Nectarine trees, proper either for final tranſplantation into the garden, againſt South walls, and ſome on Weſt and Eaſt expoſures, as before obſerved, arranged fifteen or twenty feet diſtance; or may remain longer in the nurſery, trained in a fanned manner againſt any kind of cloſe fence, reed hedges, or to ſtakes, &c. till wanted.

But obſerving the firſt head muſt be cut down in March to ſix or eight inches, to force out four or more laterals below, in Summer, to give the tree its firſt ſpreading form for the wall, training the ſhoots horizontally to the wall &c. at full length, all Summer, till Winter or Spring; then prune each to eight

eight or ten inches, to gain a farther ſupply of branches, and thus continue encreaſing their number annually, by ſhortening the ſhoots more or leſs, both in Winter or Spring pruning, and by pinching ſhoots of the year in Summer, as obſerved for Apricots and Peaches.

But as to the general culture of the full trained Nectarine trees, you muſt, as in Peaches, preſerve a general ſupply of the beſt placed young wood of each Summer as bearers, the future year, training them at full length all Summer, cutting out all foreright and luxuriant wood; and in Winter ſelecting plenty of the beſt-placed, laſt Summer ſhoots, in every part, quite from the bottom upward, at regular diſtances cut out the irregular and ſuperabun-

dant ones, together with part of the old bearers, down to the young wood, and ſhorten the ſupply of new ſhoots from ſix or eight, to fifteen or eighteen inches, according to their ſtrength; then nail the whole regularly to the wall, five or ſix inches diſtance.

Obſerve exactly the ſame culture as for Peaches.

The

The PEACH TREE.

THE Peach tree, *(Perſica)* a ſpecies of the *Amygdalus*, or Almond, produces the moſt valuable of our ſtone fruits, ſurpaſſing moſt others in their vaſt variety, beauty, richneſs of flavour, and long duration in perfection, they continuing in eating from July till November, in the different varieties, wherey the trees demand our principal care, as the choiceſt of wall trees, planted againſt the beſt ſoutherly expoſures; and belongs to the claſs and order *Icoſandria monogynia*, as the Almond.

There is but one ſpecies of the Peach tree, and which being conſidered by the Botaniſts

Botaniſts as a ſpecies of the Almond, (*Amygdalus*) they call it,

Amygdalus Perſica,—PERSICA, or the PEACH TREE, *having ſpear-ſhaped, ſharply-ſawed leaves, without glands* at the baſe, (as in the Almond) and ſolitary, or ſingly-placed flowers of five petals, ſucceeded by a large, round, downy fruit, conſiſting of a delicious, juicy pulp, with a nut or ſtone in the centre, containing one kernel; and compriſes many eminent varieties, ripening from July till October, in the different ſorts; which are diſtinguiſhed by the following names;

EARLY NUTMEG PEACH (very ſmall). *July.*
EARLY ANNE PEACH (ſmall). *Beginning or middle of Auguſt.*

SMALL

SMALL MIGNON PEACH. *Middle of Auguſt.*

EARLY PURPLE PEACH. *Toward the middle of Auguſt.*

WHITE MAGDALEN PEACH. *Middle of Auguſt.*

RED MAGDALEN PEACH. *End of Auguſt.*

GREAT MIGNON PEACH. *Middle of Auguſt.*

EARLY NEWINGTON PEACH. *Auguſt.*

OLD NEWINGTON PEACH. *Middle of September.*

CHANCELLOR PEACH. *End of Auguſt.*

LATE PURPLE PEACH. *Middle of September.*

MONTAUBAN PEACH. *End of Auguſt.*

NOBLESSE PEACH. *Beginning of September.*

BELLE GARDE PEACH. *Beginning and middle of September.*

BELLE CHEVREUSE PEACH. *Auguſt.*

YEL-

YELLOW ALBERGE PEACH. *Middle and end of Auguſt.*

LA TETON DE VENUS PEACH. *Middle and end of September.*

PERISQUE PEACH. *End of September, and early in October.*

RAMBOUILLET PEACH. *End of September.*

BOURDINE PEACH. *Beginning and middle of September.*

NIVETTE PEACH. *Middle and end of September.*

ROSSANA PEACH. *Beginning and middle of September.*

SION PEACH. *End of September.*

ADMIRABLE PEACH. *Middle and end of September.*

ROYAL PEACH. *End of September.*

VIOLET PEACH. *Middle of September.*

PORTUGAL PEACH.

ROYAL GEORGE PEACH. *Early in September.*

CATHARINE PEACH, (very large and beautiful). *October.*

BLOODY PEACH. *Middle and end of October.*

CAMBRAY PEACH. *October.*

NARBONNE PEACH. *October.*

MONSTROUS PAVIE of POMPONNE, (exceeding large). *End of October.*

The Peach tree grows fifteen feet high, or more, but is commonly trained as a wall tree; emitting numerous long, ſmooth green ſhoots, ornamented with long, ſpear-ſhaped, ſawed, ſmooth leaves; and produce their flowers and fruit along the ſides of the young wood of the former Summer, immediately from the eyes of the ſhoots, which always produce at the

ſame time, both a crop of fruit, and a ſupply of new ſhoots for next year's bearers; for the ſame wood rarely bears much fruit but once, except ſometimes on ſome caſual ſmall ſpurs, ariſing on the two-years wood; but muſt depend always on the laſt year's ſhoots for the main crop of fruit; a general annual ſupply of which muſt be retained in every part of the wall trees, as ſucceſſion bearers, at full length, all Summer, and ſhortened in Winter pruning, to encourage ſucceſſion bearers from the lower eyes, which would otherwiſe ariſe moſtly towards the extremities, and leave the bottom naked; for, as in the Apricot, the general ſupply of the immediate bearing ſhoots riſe principally only from the year old wood, produced the Summer before.

Peaches

Peaches ſhould be trained principally as wall trees, for as they bloſſom, and ſet their fruit early in Spring, in cold weather, and their young infant fruit being of a tender nature, they ſeldom bear well, or ripen the fruit in due perfection in the open ground, on eſpaliers and ſtandards; ſo ſhould plant them moſtly againſt the beſt South walls, and occaſionally on Weſt and Eaſt walls, for ſucceſſional fruit.

Generally have the main plantation compoſed principally of the common dwarf wall trees, with low ſtems, branching out near the ground, planted at fifteen or twenty feet diſtance, with the branches arranged horizontally, four or five inches aſunder.

Others may be employed occaſionally, as quarter, half, and full ſtandard wall

trees, formed with fanned, ſpreading heads, and planted between the dwarfs, againſt high walls, in order to occupy the upper parts, while the common dwarf trees are advancing below.

A few trees may alſo be planted in eſpaliers, and as detached half ſtandards, in the open ground, for variety, to take their chance.

The Peach tree proſpers in any good garden earth; but if of a rich loamy temperature it may prove an additional advantage.—*See Planting.*

Propagation and Training.

The Peach, in all its varieties, is propagated, and each ſort continued permanent,

nent, by budding them upon Plum ſtocks, or occaſionally on Peach, Almond, and Apricot ſtocks.

But for the main ſupply prefer chiefly plum ſtocks, as the moſt hardy and durable; raiſed either from Suckers ariſing from plum tree roots, or from the ſtones of the fruit, as directed for Almonds; which being planted in nurſery lines, will in two years be of due ſize to bud in July or Auguſt, within half a foot of the bottom, for common dwarf wall trees, but for half ſtandards, &c. muſt be run up three or four years, with tall ſtems, then budded, at from three or four, to five or ſix feet high; inſerting generally but one bud in each ſtock.

Then, in Spring following, the buds will advance, each with one ſtrong ſhoot, attaining three or four feet in length by next Autumn, forming the new tree, which may then, if required, be planted in the garden, finally to remain.

In March following, when the head, or firſt ſhoots are about a year old, let them be headed down to a few eyes, to gain four, five, ſix, or more laterals, below, in Summer, to form the head, training them horizontally to the right and left, in a fanned manner.—*See the General Culture.*

Planting and Culture.

Peach trees may be planted any time in open weather, from October till March, and

and may either plant thoſe of only one year old, with the firſt head entire, or ſuch as have been headed and trained in the nurſery, or that have arrived to a bearing ſtate, thereby furniſhing your wall at once with immediate bearers; having the trees digged up with their full roots; prune off only broken ones, and reduce very long ſtragglers, leaving the head entire at preſent, then plant them eighteen or twenty feet diſtance, as before mentioned, and tack their heads to the wall.

Then, in regard to general culture, it conſiſts in giving them eligible pruning and training every Summer and Winter, of which take the following obſervations.

The

The firſt pr ning conſiſts, as we be- fore hinted, in having the firſt ſhoots, or head, produced immediately from the budding, headed down when a year old, in March, to a few eyes, if not done in the nurſery, as directed in their nurſery culture, to procure ſeveral lateral branches, proceeding immediate- ly near the head of the ſtem, trained at full length all Summer, and in Winter or Spring following, ſhorten alſo all theſe ſecond ſhoots, generally from about eight to ten or twelve inches, leaving the lower ones the longeſt; and pinch young ones of the year, in Summer, in order to gain an- nually a farther requiſite ſupply of lower branches, to give the head a good ſpread- ing form, advancing regularly quite from the bottom upward, with the branches arranged horizontally, equally

to

to both ſides, four or five inches diſtance, at full length all Summer, ſhortened more or leſs always in winter pruning, according to their ſtrength, as hereafter exhibited.

Then, with reſpect to the general Summer and Winter pruning, obſerve as below.

Every Summer, in May, June, and July, go over the trees to regulate the young growth of the year, by rubbing or pruning off all the fore-right buds or ſhoots, with other ill-placed growths, and very luxuriant or rank wood, both to admit the free air, and the benefit of the ſun to the fruit, as well as to diſburthen the trees of unneceſſary and uſeleſs ſhoots; retaining a plentiful ſupply of all the young,

moderately-ſtrong regular ſide ſhoots, for next year's bearers, clearing off all others that are too numerous or unneceſſary; and train in the reſerved ſupply of regular wood cloſe to the wall, at full length, till Winter pruning.

And, in Winter pruning, we muſt keep in view a general reſerve of the beſt well-placed, laſt Summer's ſhoots, for the enſuing year's bearers, in every part, from the bottom to the extremities, at regular diſtances, generally retaining one at leaſt, on every one of the laſt year's horizontals, or ſometimes two, or more, in wide or vacant ſpaces, as the caſe requires; chuſing always the moſt promiſing and beſt-placed, and retrenching cloſe all the ſuperfluous, or too abundant ones, very

very rank, and all ill-placed ſhoots, and very weak twigs, with part of moſt of the laſt year's bearers, and old horizontals, pruned down to the firſt beſt ſhoots they ſupport, together with any old, long, naked branches, unfurniſhed with young wood, cut either entirely out, or down to any good lateral ſhoot, or eligible young branch, furniſhed therewith; cut out, likewiſe, all dead wood and old ſtumps; thus clearing out all uſeleſs and bad growths, to make proper room to train the neceſſary ſupply of young bearers, which, as you go on, ſhould generally be ſhortened, more or leſs, as directed below.

Likewiſe cut off all ſmall lateral twigs, ariſing on the ſides of the main ſhoots, retained for bearers.

But any ſmall fruit ſpurs ariſing on

the two years wood, may be preſerved, as they often afford good peaches.

As you proceed in this general Winter-pruning, ſhorten moſt of the reſerved ſupply of young bearing wood, that they may produce ſucceſſion-bearing ſhoots from the lower eyes; otherwiſe will furniſh them only towards the top, and leave the bottom naked, being careful, however, to prune them according to their ſtrength, the moderate ones to eight, ten, or twelve inches, the ſtronger ones to twelve or fifteen, and the ſtrongeſt prune from about fifteen or eighteen inches, to two feet long; and very ſtrong luxuriant ſhoots of a generally vigorous-ſhooting tree, may be left ſtill longer in proportion, becauſe, if vigorous ſhoots are

cut

cut ſhort, it promotes a ſtill more luxuriant growth, without fruitfulneſs.

Obſerve, likewiſe, in ſhortening the bearing ſhoots, not to cut below all the bloſſom buds, but generally cut to a wood bud, or twin bloſſom, as explained in the Apricot.

As ſoon as a tree is thus Winter pruned, let it be directly nailed regularly to the wall, ranging the branches and ſhoots equally to both ſides, ſtrait and cloſe, four or five inches aſunder.

The PEAR TREE.

THE Pear tree *(Pyrus)* is the original ſpecies of the genus *Pyrus*, which comprehends alſo the Apple *(Malus)*, and the Quince *(Cydonia)*, as ſpecies of the ſame genus, each of which, however, is treated of ſeparately under its proper head, and, like the apple, is remarkable for the comprehenſive variety of its fruit, which may be divided into three orders, viz. Summer, Autumnal, and Winter Pears, all the offſpring of one common ſpecies, belonging to the claſs and order *Icoſandria Pentagynia*, being twenty or more ſtamina and five ſtyles in flower.

There

There being but one real ſpecies of the Pear tree, and being the original of the genus *Pyrus* aforeſaid, the botaniſts call it,

Pyrus communis, COMMON PEAR TREE, *having oval ſerrated leaves, and corymbous cluſters of flowers on long peduncles*, compoſed of five white petals, with a germen underneath, becoming a pyramidal fruit, moſtly extended at the baſe, and comprehend numerous varieties, ripening in ſucceſſive order, from July till October, viz.

Summer Pears.

Summer Pears comprehend the early varieties, that ripen for eating immediately off the tree, attaining perfection in the

the different ſorts, from July till September, and will not keep long; ſome only a few days after they are fully ripe, others not above a week or fortnight, viz.

LITTLE YELLOW MUSK PEAR. *July.*

GREEN CHISSEL PEAR. *Middle and end of July.*

CATHARINE PEAR. *End of July and beginning of Auguſt.*

RED MUSCADELLE PEAR. *End of July and beginning of Auguſt.*

JARGONELLE PEAR, (large and fine). *Middle of Auguſt.*

CUISSE MADAME, or WINDSOR PEAR, (large and beautiful). *Middle and end of Auguſt.*

EARLY RUSSELET PEAR. *Middle of Auguſt.*

GREAT BLANQUETTE PEAR. *Middle of Auguſt.*

LITTLE BLANQUETTE PEAR. *Middle or end of Auguſt.*

MUSK ROBINE PEAR. *End of Auguſt.*

AUGUST MUSCAT PEAR. *End of Auguſt.*

ORANGE MUSK PEAR. *End of Auguſt.*

PERFUMED PEAR. *End of Auguſt.*

RED ORANGE PEAR. *End of Auguſt.*

SUMMER BON CHRETIEN. *Beginning of September.*

SUMMER BERGAMOT PEAR. *Middle of September.*

ORANGE SUMMER BERGAMOT. *End of September.*

ROSE WATER PEAR. *Middle of September.*

SALVIATI PEAR: *September.*

CRAWFORD PEAR. *September.*

GREEN MUSK PEAR. *September.*

LONG-STALKED BLANQUETTE. *September.*
PEAR PIPER. *September.*
St. JAMES's PEAR. *September.*
LEMON PEAR. *September.*
RED ADMIRABLE, (large). *September.*

Autumn Pears.

Comprehend a list of choice eating Pears, that attain perfection for eating from about the end of September, or beginning of October, till November and December, and are mostly of a handsome size, and some fine and large.

AUTUMN BERGAMOT. *End of September and beginning of October.*
BROWN BEURRE PEAR, (very fine). *Beginning of October.*
WHITE BEURRE. *Beginning or middle of October, till November.*

RED BEURRE. *Beginning or middle of October.*

SWISS BERGAMOT. *End of September.*

GREAT RUSSELET. *End of September.*

MONSIEUR JOHN. *End of October, till December.*

SWAN'S EGG. *End of October, and November.*

CRESANE PEAR, (large and fine). *End of October till December.*

MUSCAT FLEURY PEAR. *October till December.*

ROUSSELINE PEAR. *End of October till November.*

MARQUIS'S PEAR.

AUTUMN VERTE LONGUE. *October till December.*

GREY GOOD-WIFE. *End of October, November, &c.*

BEURRE BERGAMOT. *October, November, &c.*

FRENCH BERGAMOT. *October, November, &c.*

POUND PEAR, (very large) *End of October, November, &c.*

GREEN SUGAR PEAR. *End of October and November.*

Winter Pears.

Under this head is compriſed a valuable collection of the fineſt and richeſt eating Pears, with ſome that are eminent for baking, and other culinary purpoſes; attaining full growth on the trees towards the middle and end of October, but not maturity for eating, till after being gathered and laid ſome conſiderable time

in

in the houſe; ſome, probably, three, four, or ſix weeks, others two, three, or four months; ripening as they lie, in ſucceſſive order, from November till Spring and Summer following, in the different varieties, as below.

WINTER BEURRE. *December and January, &c.*

WINTER BERGAMOT. *November till January, &c.*

ST. GERMAIN PEAR, (large and fine). *December till Spring.*

COLMAR PEAR. *December till January, &c.*

VERGOULEUSE PEAR. *December and January, &c.*

HOLLAND BERGAMOT. *January till April.*

WINTER RUSSELET. *January, February. &c.*

SPANISH

SPANISH BON CHRETIEN. *December, January, &c.*

WINTER BON CHRETIEN. *February and March, till May.*

CHAUMONTELLE PEAR. *December till March, &c.*

WINTER VERTE LONGUE. *December, January, &c.*

MARTIN SEC PEAR. *November till January.*

DAUPHINE PEAR. *End of November, December, and January.*

MARTIN SIRE. *December and January.*

ST. MARTIAL PEAR. *January or February, till May, &c.*

GERMAN MUSCAT. *January or February, till April or May.*

WINTER THORN. *December till February, &c.*

EASTER

EASTER BERGAMOT. *January or February, till April or May.*

GOOD LEWIS. *December, &c.*

AMBRETTE PEAR. *December and January.*

EASTER ST. GERMAIN. *February till April, &c.*

ST. AUSTIN. *December till February.*

The following are very large, hard Pears, in eſtimation chiefly for baking, and other culinary purpoſes.

UNION, or UVEDALE'S ST. GERMAIN. *November till May.*

BLACK PEAR OF WORCESTER, (remarkable large) *November till March or April.*

CADILLAC. *December till April or May.*

DOUBLE FLEUR. *January till May.*

The Pear tree grows thirty feet high,

or

or more, branching in ſome ſorts erectly, in others more ſpreading and extended; and produces its flowers and fruit upon ſpurs or ſtuds, emitted numerouſly from the ſides and ends of the branches, of from three or four, to many years old; the ſame branches and ſpurs continuing improving in fruitfulneſs many years; the branches encreaſing the number of fruit ſpurs annually, as they advance in length; ariſing firſt towards the extreme parts, then, by degrees, laterally, all along the ſides; which ſhews, that the the branches muſt not be ſhortened in their general growth, becauſe it would both cut away the firſt fruitful parts and force out immenſe quantities of uſeleſs lateral wood ſhoots, inſtead of fruit ſpurs, and retard their bearing.

All

All the varieties of Pear trees are cultivated ſucceſsfully, both as common high ſtandards, and half ſtandards; and as wall and eſpalier trees for the choicer ſorts.

But may plant a larger ſhare of common detached ſtandards, for the main ſupply, in the open quarters of the garden, orchard, &c. arranged thirty or forty feet diſtance; the heads permitted to branch out freely to their full extent, without ſhortening the branches, and they will naturally furniſh bearing ſpurs abundantly.

Should allot, principally, the prime ſorts of Pears for walls and eſpaliers, in order to forward and improve the ſize,

beauty, and flavour of their reſpective fruits; for example:

Have a few trees of the beſt Summer Pears; a more plentiful ſupply of the fineſt Autumn kinds; together with a principal ſhare of the choiceſt Winter varieties; plant ſome againſt South-Eaſt, or Weſt, or Eaſt walls, and others in well-expoſed, ſunny eſpaliers; or ſome of the Summer, and forward Autumn kinds, on North walls; but allow the Winter Pears principally a good ſunny expoſure; arranging the whole twenty feet diſtance, at leaſt; but if twenty-five or thirty feet, they will in the end prove abundantly more fruitful, by having full ſcope to extend the branches horizontally, ſix inches aſunder, without ſhortening,

ening, and they will emit fruit ſpurs along their ſides the whole length.

May alſo train ſome as half and full ſtandard wall trees, formed with tall ſtems, and fanned heads, to plant againſt high walls or buildings, or between the common dwarf wall trees.

However, in default of ſufficient wall and eſpalier room, may cultivate any of the ſorts as common ſtandard trees, in the open ground. All the Summer and Autumn Pears will ripen abundantly well; and moſt of the Winter kinds alſo often attain tolerable perfection on ſtandards.

The Pear-tree is very hardy, ſucceeds in any good fertile ſoil capable of yield-

ing eligible crops of kitchen herbage, graſs, or corn, &c. as remarked of other fruit trees.

Propagation and Training.

All the varieties of Pears are propagated and continued diſtinct by grafting, and budding them upon any kind of ſeedling Pear ſtocks, and occaſionally on Quinces, to form more dwarf or moderate growers; for low walls and eſpaliers, &c. may chiefly riſe ſtocks of any of the Pear kind for the general ſupply, raiſed and planted in nurſery rows, as directed for Apples, to be trained to a proper ſize to graft or bud, at ſix feet high for full, and lower in proportion for half and quarter ſtandards, and within a foot of the bottom for dwarf, wall, and eſpalier trees; inſerting generally but one graft, &c. in each

ſtock;

ſtock; and when they have ſhot, and formed their firſt heads of one Summer's growth, they may either be planted out in Autumn, &c. to remain, if required, or may be previouſly trained in the nurſery.

Obſerving, the ſtandards may either have the firſt ſhoots only, cut over in March to a few eyes, to obtain laterals for forming a more full and low-ſpreading head, or permitted to run and form a more erect and lofty handſome growth.

But the wall and eſpalier young trees ſhould generally have the firſt head pruned down low, at a year old, in Spring, to gain a fuller ſupply of lower horizontals, regularly from the bottom; and, if neceſſary, ſome of the middle-moſt of theſe ſecond ſhoots may alſo either be pinched

ſhort

ſhort the ſame year, early in June, or pruned down in Spring following, to promote more ſpeedily and effectually a farther ſupply of branches to furniſh the wall, &c. regularly upward. Obſerving to rub off early in Summer all foreright ſhoots, and train in the regular ſide ones horizontally, at full length, five or ſix inches aſunder: continue alſo, after this, to train moſt of the future requiſite ſupply of horizontals always entire, at the ſame diſtance, to form bearing branches, which in thoſe trees muſt not be ſhortened.

Thus the young Pear trees, raiſed and trained as above, continuing their general branches entire, they, both ſtandards and wall trees, &c. will begin to emit ſtuds or ſpurs for bearing, when from two or three to four or five years old.

Planting

Planting and General Culture.

Pear trees, of from one or two to five or six years old, having formed heads, are proper for final tranſplantation, in Autumn, Winter, or Spring; planting them in the common method; [*See Planting.*] the ſtandards thirty or forty feet diſtance, as aforeſaid, and the wall and eſpaliers not leſs than twenty; ſupporting the tall ſtandards erect with ſtakes till rooted afreſh, and training the branches of the dwarfs horizontally to the wall and eſpalier.

Then, as to future culture of pruning, &c. the ſtandards require but little; but the wall and eſpalier trees require it annually, in Summer and Winter.

Let the ſtandards extend freely above; only prune out any very irregular, or croſſing

croſſing and crowding branches, and dead wood, permitting the general regular branches to advance according to their natural growth.

But the wall and eſpalier Pears having their branches conſtantly arranged horizontally, five or ſix inches aſunder, retain the ſame branches many years as bearers, at full length, as far as the allotted ſpace will admit, and as they will annually produce many uſeleſs ſhoots, they muſt be pruned every Summer and Winter.—Early every Summer go over the trees, and rub off all fore-right, and evidently too abundant and very rank ſhoots of the year, and train in only the main leading ſhoots and the beſt regular ſide ones entire, to chuſe from in Winter pruning, if wanted.——In Winter pruning, performed from November till

Spring,

Spring, that retaining the ſame bearing branches five or ſix inches diſtance, examine if any caſually aſſume a decayed, or bad unfruitful growth, or are too crowded, or have advanced beyond their limited bounds, and prune them down to ſome lower bearer, if convenient; or occaſionally retain regular young ſhoots of laſt Summer, advancing from below, at full length, to ſupply vacancies; and retain always the terminating or leading ſhoots to each horizontal entire, where room enough; cutting out all the ſuperfluous, lateral young wood not now wanted, cloſe to the main branches, leaving no ſtump, but carefully preſerving all the proper natural fruit ſpurs; and cut out cloſe, old and dead ſnags; [*See Apple tree*] then directly nail or tye in the general branches ſtrait and cloſe to the wall, &c. at regular diſtances.

The PLUM TREE.

THE Plum tree *(Prunus)*, furniſhes a large collection of different varieties of its fruit, and is the original ſpecies of the family of *Prunus*, which compriſes the Apricot, Bullace, Cherry, &c. as ſpecies of the ſame genus, agreeable to the botanic characters of the flowers and fruit; and belongs to the claſs and order *Icoſandria Monogynia*, flowers containing twenty ſtamina and one ſtyle.

There is but one ſpecies of common Plum tree, which is called

Prunus Domeſtica; i. e. HOUSHOLD or COMMON CULTIVATED PLUM: *having oval, ſpear-ſhaped leaves, and the peduncles*

or

or footſtalks of the flowers, for the moſt part ſingly, ſupporting white flowers of five petals, ſucceeded by the plums, which are round or oblongiſh, with a ſtone in the centre; and are of many different forms, ſizes, colours, and qualities, in the numerous varieties; conſiſting of whites, blacks, yellows, reds, blues, and greens; ripening from July till the end of September, or beginning or middle of October, and of which there are varieties without end. But the moſt noted and approved ſorts are known by the following names:

EARLY WHITE, or PRIMORDIAN PLUM. *Middle or end of July.*

EARLY BLACK DAMASK. *End of July.*

LITTLE BLACK DAMASK. *Beginning of Auguſt.*

ORLEANS PLUM, (red). *End of Auguſt and September.*

QUEEN CLAUDE, (green). *September.*

LITTLE QUEEN CLAUDE, (yellowiſh). *September.*

GREAT DAMASK VIOLET. *Auguſt.*

GREEN GAGE PLUM, (very fine). *Auguſt and September.*

BLUE GAGE. *September.*

WHITE PERDRIGON. *End of Auguſt and September.*

BLUE PERDRIGON. *End of Auguſt, &c.*

BLACK PERDRIGON. *End of Auguſt, or beginning of September.*

DRAP D'OR, or CLOTH OF GOLD, (bright yellow). *Beginning or middle of September.*

ROCHECOURBON, (red). *End of Auguſt, &c.*

WHITE BONUM MAGNUM, or EGG PLUM, (very large). *September.*

RED BONUM MAGNUM, or GREAT IMPERIAL PLUM, (very large). *September.*

FOTHERINGHAM PLUM, (large dark-red). *Beginning or middle of September.*

BRIGNOLE PLUM, (yellowiſh). *September.*

WENTWORTH PLUM, (yellowiſh). *Sept.*

ST. CATHARINE PLUM, (yellowiſh amber). *End of September.*

ROYAL RED PLUM. *End of Auguſt and September.*

CHESTON PLUM, (blackiſh). *Middle of September.*

MIRABELLE PLUM, (greeniſh-yellow). *End of Auguſt, &c.*

IMPERATRICE, or EMPRESS PLUM, (dark red). *End of September, and beginning of October.*

APRICOT PLUM, (large yellow). *Beginning and middle of September.*

Inferior

Inferior Sorts.

PEAR PLUM, (whitiſh yellow). *September.*

LITTLE GREEN DAMASK. *Middle or end of September.*

MUSCLE PLUM, (dark red).

ST. JULIAN PLUM, (dark violet). *End of September, &c.*

DAMASCENE PLUM, (dark blue). *September and October.*

CHERRY PLUM, (ſmall red). *Valued chiefly as a curioſity, but as it bloſſoms early is often cut off by the cold.*

The Plum tree grows fifteen or twenty feet high, branching with a moderate-ſpreading head, garniſhed with oval, ſpear-ſhaped leaves, and produces its flowers and fruit both on the young wood, from the eyes of the ſhoots, and on ſpurs ariſing

ariſing on the ſides and ends of the branches, of from two or three, to many years old; as in the Cherry, Pear, &c. the ſame branches continuing fruitful, and multiplying the bearing ſpurs many years, as they advance in length; and only require renewing with young wood occaſionally, as any old bearer caſually becomes unfruitful or decayed; being generally all permitted to extend in length, as ſhortening both deſtroys the firſt fruitful parts, promotes a great luxuriancy of uſeleſs wood from the lateral buds, and prevents their forming fruit-ſpurs.

This determines that we muſt not ſhorten the branches of plums in their general growth; beſides too much uſe of the

the knife on thoſe trees occaſions the branches to gum and decay.

The trees bear ſucceſsfully in any order of training, either full or half ſtandards, &c. and as wall and eſpalier trees; the ſtandards planted twenty-five or thirty feet diſtance, permitting them to branch out freely, at full length, and form a full ſpreading head, pruning only any very irregular, rambling, or rampant growths; and the wall and eſpalier trees arranged eighteen or twenty feet aſunder, with the branches trained down horizontally, five or ſix inches diſtance, without ſhortening, but extended as far as room will permit, eſpecially all thoſe deſigned as bearers, and they will emit fruit ſpurs all along their ſides.

It is proper to have both a good ſhare of common ſtandards in the garden and orchard for the general ſupply; ſelecting the beſt ſorts for walls and eſpaliers, in different expoſures, which will furniſh larger, earlier, and later fruit, and of an improved flavour.

They will all ſucceed in any common ſoil of a garden, orchard, &c. *See Planting*

Method of Propagation and firſt Training.

Plum trees, in all their varieties, are propagated, and continued always of the ſame ſorts, by grafting or budding them upon any kind of plum ſtocks, raiſed either from ſuckers of the root, or from the ſtones of the plums, ſowed in Autumn, two inches deep; and when a

year old, planted out in rows a yard diſtance, to have from two or three, to four or five years growth; then graft or bud them with the proper ſorts, from four to ſix feet high, for half and full ſtandards, and within a foot of the ground for wall and eſpalier dwarfs, &c.

When the firſt ſhoots, from grafting, &c. are a year old, cut them down in March to a few eyes, to procure lower branches in order to give the head its firſt requiſite form, as in other fruit trees.

Afterwards let the ſtandards remain entire, and branch out each way: but the dwarfs for walls and eſpaliers may have ſome of the ſucceeding ſhoots ſhortened occaſionally, either in Spring, or young ones of the year pinched in Summer, to procure

procure a farther ſupply of collaterals to cover the wall and eſpalier regularly upward, with bearers, training them at full length.

Final Planting and General Culture.

Plum trees may be planted where they are to remain, when from one or two, to ſeveral years old, in Autumn, Winter, or Spring, with their heads moſtly entire, except cutting out any very irregular growth; arranging the ſtandards twenty-five or thirty feet diſtance, and the wall and eſpalier trees eighteen or twenty.

And as to general culture, obſerve nearly the following directions.

The ſtandards ſhould be permitted to branch out freely above, and form regu-

lar full heads, with the branches extending at their full length, only retrenching occaſionally any very irregular and ſuperabundant crowding growths, very long ramblers, and dead wood; with all ſuckers from the root and ſtem, and rampant ſhoots in the middle of the head: permitting all the general regular branches to extend as nature directs, without reducing their length; and they will ſoon be full of natural fruit ſpurs.

As to the wall and eſpalier plums, they muſt have their branches arranged horizontally to the wall and eſpalier, five or ſix inches diſtance, without ſhortening; and continue training, where neceſſary, a farther ſupply of new regular ſhoots of each future year, till they furniſh the whole allotted ſpace of walling, &c.

&c. completely with bearers, generally all extended entire; for if plum branches are ſhortened it will retard their bearing, and force out numerous rampant, uſeleſs, unfruitful ſhoots, and no fruit buds; but being arranged at their natural length, they ſhoot moderately, and in two or three years furniſh abundant bearing ſpurs; the ſame branches ſhould be continued many years as bearers, or as long as they remain fruitful, and only retain occaſional new ſupplies of young wood, as any of the old caſually aſſume a barren or decayed ſtate.

But to preſerve regularity and fruitfulneſs in the wall and eſpalier plums, they muſt be pruned every Summer and Winter.

Go over the trees every Summer, in June

June and July, and diſplace all fore-right young wood, evidently ſuperfluous and very rank ſhoots, with other uſeleſs growths of the year, retaining only ſome of the regular, moderate-growing ſide ſhoots, and main leaders, trained in at full length for occaſional ſupplies in Winter; continuing the whole cloſe to the wall to admit the Sun and free air to the fruit.

Then in Winter pruning, continuing the ſame bearers five or ſix inches diſtance, obſerve if any diſcover a bad growth, or worn-out, naked, unfruitful ſtate, which may now be pruned or cut down to other more eligible wood, or to any contiguous young ſhoots; retaining alſo regular ſhoots of laſt Summer, advancing below in vacancies,

cies, if any; and all ſuch ſhoots that are not now wanted for the above purpoſes, ſhould be cut out quite cloſe, with all dead wood; preſerving all the ſhort natural bearing ſpurs on the ſides of the branches, &c. but cut out too long, fore-right, projecting ones, old ragged ſnags and ſtumps; ſtill retaining all the branches at full length, and let them be directly all trained in with due regularity to the wall and eſpalier.

The

The QUINCE TREE.

THE Quince tree *(Cydonia)*, a ſpecies of the family of *Pyrus*, or Pear, but formerly conſtituted the genus *Cydonia*, is famous for its large, beautiful, golden-yellow fruit, of great fragrance, which, though too hard and auſtere to eat raw, is excellent for various culinary preparations; it therefore claims a place in the general collection of fruit trees, and is of the claſs *Icoſandria*, and order *Pentagynia*, as the Pear.

There is but one ſpecies of the Quince, comprehending a few varieties, and is termed by the botaniſts,

Pyrus Cydonia,—CYDONIA, or QUINCE TREE; *having entire or unſawed oval leaves*,

leaves, hoary underneath, and whitiſh-red flowers placed ſingly, compoſed of five petals, twenty ſtamina, and five ſtyles, ſucceeded by large pyramidal and round golden-yellow fruit, having a hard ſour pulp, incloſing, generally, five hard kernels or ſeeds, and conſiſts of the following varieties, ripening in Autumn.

PEAR-SHAPED QUINCE.
APPLE-SHAPED QUINCE.
PORTUGAL QUINCE, with a tender pulp.
EATABLE QUINCE, having a tender pulp; ſometimes eaten raw.

The Quince tree grows ten or twelve feet high, branching low and ſlenderly, within a moderate compaſs, and produces its flowers and fruit ſingly; ſometimes on ſmall lateral ſhoots of the year, and

upon ſmall ſpurs from the ſides of the older branches, which ſhould generally be permitted to extend in length, without ſhortening them by pruning.

Quinces are valued principally only as a culinary fruit for ſtewing, baking, making marmalade, and to enrich the flavour of Apple-pies, tarts, &c. as being of a very heightened fragrance when fully ripe, but generally too hard and aſtringent to eat raw, as before obſerved.

A few trees ſhould be arranged in the garden or orchard, chiefly as ſtandards, and ſome alſo in eſpaliers for variety; planted eighteen or twenty feet diſtance; permitting the ſtandards to branch out freely around, and they will bear abundantly; and train the eſpalier trees with their branches

branches horizontally, at full length, ſix inches aſunder; managed as for Apples and Pears.

The trees are very hardy, and will thrive almoſt any where; but they generally affect a moiſt ſituation, and are therefore often planted along ponds, and ditch ſides, in out grounds, &c.

Propagation and Training.

Theſe trees are expeditiouſly raiſed from ſuckers, cuttings, and layers, and occaſionally by grafting, &c.

By Suckers.——Dig up the ſuckers from the roots of any old Quince trees, in Autumn, &c. plant them in nurſery-rows, and train ſome for ſtandards, with four, five, or ſix feet ſtems; and others

for dwarfs, headed down low to obtain lower branches.

By CUTTINGS.—Plant cuttings of the young ſhoots of the branches in Autumn or Spring, in a ſhady border; they will be well rooted by next Autumn; then plant them in open ground, to be trained as the Suckers.

By LAYERS.—Lay any convenient low-placed young branches in Autumn; they will root freely, fit to plant off next year, and managed as above.

By GRAFTING, &c.—Any particular deſirable variety may be grafted or budded, either upon common Quince or Pear ſtocks, to continue and improve the ſort, and have the trees ſooner raiſed to a bearing ſtate.

Planting

Planting and Culture.

Plant the ſtandards twenty feet diſtance in the garden or orchard, or along the ſides of ditches, or pools of water, &c. and let them branch into full heads, only retrenching occaſionally very irregular or ſtraggling growths, and permitting all the other general branches to remain entire.

And if any are deſigned for eſpaliers, ſet them fifteen or twenty feet aſunder, the branches arranged horizontally, generally without ſhortening, and managed in general as adviſed for Apples and Pears.

The RASPBERRY SHRUB.

THE Raſpberry *(Rulus Idæus)*, is an under-ſhrubby plant, four or five feet high, a ſpecies of the family of *Rubus*, or bramble, and produces agreeable eatable fruit of the baccaceous or berry kind, in eſtimation both as a deſert fruit to eat raw, and for making tarts, ſauces, raſpberry jam, and other culinary preparations, and therefore highly demands culture in every garden: it belongs to the claſs and order *Icoſandria polygynia*, flowers having twenty or more ſtamina, and many ſtyles.

There is but one ſpecies of the common fruit-bearing Raſpberry, furniſhing ſeveral varieties, and according to the botaniſts

botaniſts bears the following name and deſcription.

Rubus Idæus, COMMON RASPBERRY PLANT; *having prickly ſtalks, pinnated or winged, five and three-lobed, rough leaves, on channelled footſtalks*, and cluſters of white and purple flowers, of five petals, with numerous ſtamina and ſtyles, ſucceeded by roundiſh red and white ſoft berries, compoſed of many acini, and conſiſts of the following varieties, ripening in July and Auguſt, viz.

COMMON RED RASPBERRY. *July and Auguſt.*

COMMON WHITE RASPBERRY. *July, &c.*

SMOOTH-STALKED RASPBERRY. *July, &c.*

TWICE-

TWICE-BEARING RED RASPBERRY. *July, and again in September and October.*

TWICE-BEARING WHITE RASPBERRY. *July and September, &c.*

Of the above varieties we recommend the firſt two or three ſorts for general culture, for the main ſupply, as being generally the moſt plentiful bearers; but the twice-bearing ſorts ſhould alſo be admitted in every collection, for they likewiſe bear tolerable crops of good fruit; and what is remarkable, they produce two crops every Summer; the firſt in July, and the ſecond in September, &c. often in tolerable good perfection.

The Raſpberry plant grows four or five feet high, ariſing with many ſlender, erect, prickly, and ſmooth ſtems, immediately from the root, annually; of an under-

under-ſhrubby herbaceous nature, as although they become ſomewhat ligneous or woody; they are not durable, being only annual, or, at moſt, biennial; riſing from the root one year, and the next emitting many ſmall lateral or ſide ſhoots, bearing the fruit the ſame Summer, then totally die to the root in Winter following; ſucceeded, however, always by a plentiful ſucceſſion of young ſtems from the ſame root or ſtool in Summer, for next year's bearing; every winter the old decayed ſtems, which bore laſt Summer, are retrenched to the bottom, to give place to the young ſucceſſional ſupply, which, at the ſame time, are thinned to from three or four, to five or ſix of the ſtrongeſt, on each main root or ſtock, and their weak tops generally pruned

down a foot, or more, if very long, to render them more robuſt, erect, and regular, as well as to promote a more plentiful ſupply of collateral ſhoots in Summer, for the immediate bearers.

For the flowers and fruit are always produced on the ſhoots of the year, emitted from the ſides of the main ſtems, as aforeſaid, and at the axillas or angles, formed by the ſtem and collateral ſhoots; gnerally terminating the ſhoots in cluſters, flowering in June; and the fruit ripens in July and Auguſt.

They are very hardy plants, that proſper any where in a garden, or any open ground; planted generally in rows four feet and an half diſtance, and a yard in the row; and ſometimes alſo diſpoſed ſingly

gly in borders, verging walks, and in ſhrubbery compartments, &c. for variety; generally permitted to advance with ſeveral ſtems from the ſame root, in a buſhy manner.—*See the General Culture.*

Sometimes, for variety, a few are planted eſpalier ways, and the ſhoots arranged at full length to ſtakes.

A plantation of Raſpberries continue bearing plenteouſly for ſeveral years, renewing their ſtems annually, as before remarked; though, I would obſerve, that a plantation of more than five or ſix years ſtanding, generally produces ſmaller fruit, and of an inferior quality to that on younger plants; it is therefore proper to plant them afreſh in another plat of ground every four, five, or ſix years, from young ſuckers or ſtems, as below.

Method of Propagation, Planting, and Culture.

The propagation of Raſpberries is effected with facility and expedition by the ſuckers or ſtems, ariſing abundantly from the root, annually in Summer, forming proper plants for planting out in Autumn, Winter, or Spring following, and will bear fruit the enſuing Summer.

The method is this:

Having, in Autumn or Winter, &c. fixed on an open ſpot of good ground, well dunged, and prepared by proper digging, &c. then proceed to procure the plants from a plantation of good well-bearing Raſpberries, chuſing a quantity of the ſtrongeſt outward young ſuckers, dug up with as many fibres as poſſible, pruning their long ſtraggling roots, and

and any naked woody knobs, part of the old ſtock, that may adhere; preſerving any young advancing buds at foot of the ſtem, for future ſhoots or ſucceſſion bearers: and pruning the top of each plant to about a yard long, ready for planting.

Then proceed to plant them by line and ſpade, in rows, South and North, if convenient, for the greater advantage of the ſun; placing them a yard diſtant in each row, and the rows a yard and an half, or five feet aſunder, each plant in an upright poſition: and if dry ground, and late Spring planting, give each a good watering, at bottom, to ſettle the earth, and forward their taking freſh root.

Thus they will ſoon readily take root, pro-

produce ſhoots at top, and bear fruit the enſuing Summer, as well as ſend up each ſeveral ſucceſſion ſtems from the bottom, and form a full plantation for bearing plentifully the ſucceeding year.

Then, as to general culture, obſerve as follows:

In Summer, keep them clean from weeds, by occaſionally hoeing the ground in dry weather, pulling up all widely-ſtraggling ſuckers of the plants, ariſing between the rows, &c. and reſerving a ſufficiency of the ſtrong ſhoots about each main ſtock or ſtool for ſucceſſion bearers, to produce the next year's fruit.

Every Winter, any time from November till March, they muſt have a general dreſſing, which conſiſts in retrenching all the old ſtems, or laſt Summer's bearers, as

uſeleſs, they not ſurviving the Winter to bear again: ſelecting, at the ſame time, a ſupply of the ſtrongeſt young ſtems on each root, to furniſh next year's fruit, and thin out the ſuperabundancy: proceed therefore to cut or break down all the old ſtems cloſe to the ground; and ſelect from three or four, to five or ſix of the ſtrongeſt, beſt-placed, young ſhoots on each ſtock; cut out alſo all the others cloſe to the bottom, together with all ſtragglers between the main plants, and let each of the reſerved ſhoots have its weak or bending top pruned, to render them more robuſt and ſtrong, to ſupport their upright poſition in Summer, as well as to encourage a ſtronger production of lateral twigs as the immediate bearers, as before explained.

Though

Though ſometimes we ſhorten the ſtems but moderately, or only juſt down to the bend or weak part at top, and ſometimes not at all; and if they are long, and ſtand ſtragglingly wide, plait them together by threes, &c. or in an arched manner at top, and they will thus ſupport one another upright.

But, for variety, may train ſome rows to ſtakes arranged eſpalier ways, as before obſerved, laying the ſhoots horizontally, nearly at full length, ſix or eight inches aſunder, and they will thus often produce larger fruit, earlier ripe, and with an improved flavour.

As ſoon as the Raſpberries are Win-dreſſed, clear off all the cuttings and rubbiſh,

biſh, and let the ground be digged one ſpade deep; and as you proceed, dig up all ſtraggling ſuckers and roots not belonging to the main ſtools.

A little rotten dung applied once in two years between the rows, at Winter-dreſſing, and digged in, will prove beneficial in ſtrengthening the plants, as well as improve and prolong their fruitful ſtate, and promote the ſize and quality of the fruit.

The SERVICE BERRY TREE;

Or, WILD SERVICE.

THE Service-berry tree, or Wild Service *(Cratægus)*, grows wild in England, attaining a lofty ſtature, and is often introduced in gardens and orchards as a fruit tree, for the ſake of its berries, which grow in large brown bunches; and, when fully ripe and ſoft, in Autumn, have an agreeable tartiſh flavour, and makes a variety among the late fruits; and is of the claſs and order *Icoſandria Digynia*, twenty or more ſtamina and two ſtyles, to each flower.

There

There is but one ſpecies that claims attention as a fruit tree, and which the botaniſts entitle,

Cratægus Torminalis,—EATABLE, or MAPLE-LEAVED WILD SERVICE—*Having heart-ſhaped, ſeven-angled leaves, with the lower ſegments ſpreading aſunder*; and large bunches of white flowers, of five roundiſh petals, containing many ſtamina, and two ſtyles, ſucceeded by cluſters of reddiſh-brown berries, having two hard ſeeds, ripening in Autumn, which, after being gathered and lain till they become ſoft, are palatable to eat.

This tree grows forty or fifty feet high, with a large, branchy, ſpreading head, ornamented with large heart-formed, ſept-angular leaves, hoary under-

heath; and produces its bunches of flowers and fruit on long foot-ſtalks, towards the upper part and ends of the younger branches.

It grows wild in woods, in England, &c. but merits cultivation in gardens and orchards, as a fruit tree, trained chiefly as full or half ſtandards, arranged in aſſemblage, or dropped ſingly in ſhrubberies, parks, or lawns, &c.

For variety, ſome may alſo be trained as dwarfs, arranged in eſpaliers, and managed as directed for Apples, Pears, &c.

Method of Propagation, &c.

It may be propagated by the ſeed or brri es, by layers, and grafting and budding.

By

By Seed.—Sow the berries in Autumn or Winter, or early in Spring, in a bad of light earth, in drills two inches deep; and as they will probably not all riſe till the ſecond Spring, keep the bed clean from weeds all Summer, &c. and when the plants are a year old, plant them out in the nurſery, and train them with ſingle clean ſtems, from four to ſix or ſeven feet high, for half and full ſtandards; then let them branch out above, and form heads.

But if you deſign any for dwarfs, ſhould head them when young, near the ground, to gain lower branches, managing them as other dwarf fruit trees.

By Layers.—Where any of the trees furniſh low branches, or have been headed

ed down as ſtools, to produce ſhoots for layers, near the ground, lay them in Autumn in the uſual manner, and by next Autumn they will be rooted, then plant them off, and train them as the ſeedlings, directed above.

By Grafting, &c.——By this method the trees will ſooner arrive to a fruitful ſtate, and may be performed upon ſeedling ſtocks of their own kind, or hawthorn, or any ſpecies of the *Cratægus*, or Wild Service ſtocks, in the uſual method, both for ſtandards and dwarfs, as directed for Apples, &c.

Final Planting, &c.

When the trees are from five or ſix, to ſeven or eight feet high, as ſtandards, they may be planted where they are to remain, in the order before obſerved; and

and permitted generally to aſſume their own mode of growth, except reforming any caſual irregularities, as in other ſtandard fruit trees.

And for eſpaliers, they being previouſly trained with low ſtems, branching near the ground, may plant them eighteen or twenty feet diſtance, arranging the branches horizontally, moſtly at full length, ſix inches aſunder, and managed as for Medlars, Pears, &c.

The SORB TREE,

Or CULTIVATED SERVICE.

THE Sorb, or cultivated Service, (*Sorbus*) is of a ſeparate family or genus from the Wild Service, by having three ſtyles and three ſeeds, the other but two; and the fruit is conſiderably larger, being the ſize of little apples, but alſo of the baccaceous or berry kind, and ſomewhat of the nature of Medlars, in not being good to eat till it aſſumes a ſtate of decay, in Autumn, and belongs to the claſs and order *Icoſandria trigynia*, i. e. twenty or more ſtamina and three ſtyles in each flower.

There

There is but one ſpecies meriting culture as a fruit tree, viz.

Sorbus Domeſtica, HOUSHOLD, or CULTIVATED SERVICE TREE.—*Having pinnated or winged leaves*, of many pair of lobes, and an odd one; *hairy underneath*, and large bunches of whitiſh flowers, of five roundiſh petals, ſucceeded by Pear and Apple-ſhaped reddiſh fruit, in cluſters, containing three or four ſeeds, and conſiſts of the following varieties, ripening in Autumn.

PEAR-SHAPED SERVICE.
APPLE-SHAPED SERVICE.

The trees grow thirty or forty feet high, adorned with winged leaves, and produces the flowers and fruit at the ends and ſides of the younger branches, and

on lateral ſhoots or ſpurs, generally in bunches, flowering in May or June, the fruit ripens in September, which being then gathered, and depoſited in the fruitery a little time, to become mellow, they will eat with an agreeable reliſh, effecting a variety among the Autumn fruits.

A few trees of this ſort, trained as full or half ſtandards, may be ranged in the garden or orchard, or dropped ſingly in different compartments of the ſhrubbery, &c. and may likewiſe, for variety, and to improve the fruit, train ſome in eſpaliers, in concert with Medlars and Quinces, &c.

Method of Propagation and Training.

It may be propagated by ſeed; but to continue the deſirable varieties diſtinct and

and permanent, they ſhould be propagated by grafting and budding.

By SEED.—Sow the ſeeds of the fruit in Autumn, either in a warm border, two inches deep, or in pots, to move under ſhelter of a frame in froſty weather; but if plunged in a hot bed in Spring, it will forward the germination of the ſeeds; but thoſe in the full ground will alſo grow, though not ſo forward as the others; plant them out in Autumn or Spring following, in nurſery-rows; and train the principal part as half and full ſtandards, with from four to ſix or ſeven feet ſtems, branching out at top, and forming ſpreading heads: ſome may be trained for eſpaliers, being headed near the ground, at one or two years old, to gain

lower branches, as directed for Almonds, Apples, &c.

By GRAFTING and BUDDING.—The approved varieties are with certainty continued by this method; worked either upon their own ſeedling ſtocks, raiſed as above, or upon Pear ſtocks, and trained for the purpoſes intended, as directed for Apples and Pears.

Planting and Culture.

They may be planted as ſtandards, when about five, ſix, or ſeven feet high, having formed proper heads, which permit generally to take nearly their own growth, like other common ſtandards.

Or if you raiſe any dwarfs for eſpaliers, for variety, plant them eighteen or twenty

ty feet aſunder, with their branches ranged ſix inches diſtance, retaining young laterals, occaſionally coming up below, to ſupply the places of old, worn-out, or too long advanced bearers, giving a Summer and Winter dreſſing, as for Apples and Pears, &c.

The VINE;

Or, GRAPE VINE.

THE Vine, *(Vitis)* claims precedence of moſt other fruit trees, for the great and rich variety of its moſt excellent and valuable fruit, the Grape, univerſally celebrated for its deliciouſly rich juice, ſo eminent for making wine; and is alſo a delicately fine eating fruit, of the richeſt flavour; it is of the berry kind, growing in large long cluſters, and comprehends numerous varieties, all the progeny of one mother ſpecies; which belongs to the claſs and order *Pentandria Monogynia*, i. e. five ſtamina and one ſtyle in each flower.

There

There are ſeveral ſpecies of Vine; but the principal noted ſort, valued for its fruit, the botaniſts diſtinguiſh by the following name, &c.

Vitis Vinifera; the VINE, or GRAPE TREE—Deſcribed, *Vine, with large angulated, lobated, ſinuated, naked leaves*; having claſpers ariſing oppoſite the baſe of the footſtalks, and cluſters of very ſmall greeniſh flowers of five petals, five ſtamina, and one ſtyle, ſucceeded by large long bunches of roundiſh or oval berries, of different colours in the varieties, ripening from July till October; ſome ſorts black, others white, red, &c. as below.

The principal varieties are generally known by the following names:

BLACK

BLACK JULY GRAPE. *Beginning or middle of Auguſt.*

BLACK SWEET-WATER GRAPE. *Middle or end of Auguſt.*

WHITE SWEET-WATER. *Middle or end of Auguſt.*

BLACK CLUSTER GRAPE, having hoary, whitiſh leaves, and ſhort compact cluſters of grapes. *September.*

EARLY WHITE MUSCADINE. *Early in September.*

WHITE MUSCADINE ROYAL, or CHASSELAS BLANC. *September and October.*

WHITE LE COUR GRAPE, or MUSK CHASSELAS. *September.*

RED CHASSELAS. *September and October.*

BLACK CORINTH, or CURRANT GRAPE, (ſmall). *Auguſt and September.*

BLACK

BLACK BURGUNDY GRAPE. *September and October.*

RED HAMBURGH GRAPE, (large). *October.*

BLACK HAMBURGH GRAPE, (large). *October.*

BLACK FRONTINAC GRAPE. *End of September and October.*

The following, being moſtly fine, large, late ripening grapes, and ſome of them exceeding large bunches, unleſs the Autumn ſeaſon proves very warm and dry, do not ripen freely in England, and are therefore often planted againſt hot walls, hot-houſes, and forcing-frames, &c. to obtain them in the utmoſt perfection early in Autumn.

RED FRONTINAC, (large and rich). *September and October.*

GRISLY FRONTINAC, (large and fine). *September and October.*

WHITE FRONTINAC, (large and rich). *September and October.*

WHITE MUSCAT OF ALEXANDRIA. *End of September and October.*

RED ALEXANDRIAN MUSCAT. *End of September and October.*

ST. PETER'S GRAPE, (black, and very large berries and bunches). *October.*

TOKAY GRAPE, (white and very rich). *October.*

WHITE SYRIAN GRAPE, (exceeding large clusters. *October.*

RED RAISIN GRAPE. *End of October.*

WHITE RAISIN GRAPE. *End of October.*

CLARET GRAPE. *October.*

Of the above varieties, moſt of the firſt ten

ten or twelve ſorts being trained againſt good ſunny walls and buildings, ripen freely in all warm dry Autumns, and ſometimes in eſpaliers, and in vineyards; but the other ſorts do not always attain perfect maturity without artificial heat, as aforeſaid.

The Vine is a flexuoſe and climbing plant, unable to elevate itſelf erect without ſupport.

It grows with long, flexible, woody ſtems, many feet high, by ſupport, making numerous ſhoots, three or four yards long, or more, in one Summer, conſiſting of many long joints, garniſhed with large, angulated leaves, attended by tendrils twining round any thing they encounter; and produces the flowers and

fruit on the young ſhoots of the ſame year, ariſing in cluſters from the buds of the ſhoots; but from ſuch ſhoots only, that ariſe immediately from the former year's wood, for Vines rarely produce immediate-bearing ſhoots from the old branches, or from any but the ſhoots produced the year before, ſo that a general ſupply of every year's ſhoots muſt be retained in every part, both in Summer, as the preſent bearers, and in Winter dreſſing to furniſh the ſucceſſion bearers next year, &c. trained moſtly at full length all Summer, and ſhortened to a few eyes always in Winter pruning:

For in Vines the ſame individual ſhoots never bear but once; but the bearers of each year producing a ſucceſſion of

of numerous ſhoots, each ſucceeding Spring and Summer, on theſe only the ſame year's fruit is always produced; and in this manner the ſucceſſion of bearing wood is continued.

All the varieties of Vine require cultivation moſtly as wall trees, againſt warm ſoutherly walls, and occaſionally in well-expoſed eſpaliers; otherwiſe the Grapes will not attain due perfection; ſo ſhould generally allot the principal ſupply againſt good South walls, pales, or buildings, open to the ſun, and occaſionally on Eaſt and Weſt walls, in default of ſufficient ſcope of South aſpects.

For this purpoſe they are commonly trained with low ſtems, half a foot or a foot high, branching out low, in order

to

to occupy the whole wall quite from the bottom; training the branches either horizontally or erectly, as the ſcope of room, and height of the wall admits; ranging the main branches a foot or more aſunder, and retaining lateral young ſhoots of each year between, advancing behind one another from the bottom to the extremities, as the principal bearers; and according as the old branches advance too long for the wall, they muſt be cut down to lower ſhoots in Winter, and the ſupply of ſhoots then retained, ſhould be ſhortened, as directed in their *General Culture.*

Some alſo of the forward Vines may likewiſe be planted in eſpaliers, as alſo in the vineyard way, arranged to ſtakes; and in favourable ſeaſons they will ripen tolerably good crops of Grapes.—*See their Vineyard Culture.*

But ſometimes, in unfavourable wet Summers and Autumns, Grapes ripen but indifferently, even againſt the beſt walls, more eſpecially the larger late Grapes; and ſometimes not at all in bad ſeaſons, for which reaſon, ſome of the choicer forward and late ſorts are often planted againſt hot walls, or forcing frames, furniſhed with ranges of flues for fires, and defended with glaſs frames in front; or ſometimes planted againſt the front or end walls of common hot-houſes, and the branches introduced, by conducting them through ſmall holes, and trained up againſt the inſide glaſſes or walls, and thus obtain early Grapes two or three months before the natural ſeaſon in the open ground; and have the late kinds ripened in the utmoſt perfection.

This

This is well worth practiſing by every one accommodated with the above conveniencies, or if only with a common Pine Apple ſtove.

However, it is alſo proper to plant ſome, both of early, middle, and late kinds, againſt common walls or pales, &c. in the open ground, to take their chance; and if their branches are kept always thin, and the ſhoots trained in cloſe all Summer to admit the full ſun, there will be no fear of ſucceſs in all favourable ſeaſons.

Vines are very hardy in reſpect to growth, and ſucceed in any good garden earth; but in dry, light, warm ſoils they are more ſucceſsful in ripening the Grapes earlier, in due perfection, and richneſs of flavour; ſo that in ſoils naturally ſtrong,

ſtrong, or of a clayey moiſt temperature, the border may be improved with light dry materials, ſuch as any light ſandy or ſtoney earth, ſea ſand, road ſtuff, lime rubbiſh, coal aſhes, &c. worked both in a ſtratum at bottom, and blended with the common earth of the border, where the Vines are to be planted.

Method of Propagation and Training.

Vines are propagated principally by layers and cuttings of the young wood of one year old, and raiſed to a ſtate of bearing in two or three years; though layer-raiſed plants often bear the enſuing Summer.

By LAYERS:—In Autumn, Winter, or Spring, chuſe ſome ſtrong lower

ſhoots, or young branches furniſhed with ſuch, and opening an aperture in the ground, longitudinally, five or ſix inches deep, depoſite the body of the ſhoot or branch therein, and pegging it firmly down, cover it with the earth, and ſhorten the top ſhoots to three or four eyes; they will thus readily take root below, and ſhoot out at top in Summer; and in Autumn following they may be planted out either to remain, or in the nurſery till wanted.

Then, in Winter, they having made ſome ſtrong ſhoots the preceeding Summer, let them be pruned to three, four, or five eyes, and trained to the wall, &c. and as they will ſhoot ſtrongly in the Summer following, from each remaining eye, train the new ſhoots moſtly entire,

till

till next Winter, then prune and train them as before, and they will bear the ſecond year. *See the General Culture.*

By Cuttings.—The young ſhoots of the former Summer are the only proper parts for cuttings, planted in Autumn, or early in Spring; chuſing principally the lower and middle parts of the ſhoots as the ſtrongeſt beſt-ripened wood, cut into lengths of about three joints: and then planted either where they are finally to remain, as obſerved of the layers, in a ſhady border, or in nurſery lines a yard aſunder, and a foot in the row; planting them almoſt down to the top, leaving only one eye above ground, and that almoſt cloſe to the ſurface.

Keep them clean from weeds, and

give waterings in Summer, when they will readily emit roots below, and ſhoots at top, which retain at full length till Winter; then ſhorten them to two or three eyes, and manage them as directed for the layer-raiſed plants, and as in the *General Culture.*

Final Planting in the Garden, &c.

Vine plants, from one or two, to ſeveral years growth, may be ſucceſsfully planted, though young plants are preferable to old, any time from November till March, in open weather.

Let them be digged up with good roots; trim off only ſtraggling or broken parts thereof, and prune the ſhoots of the head to about three eyes, if quite young

plants,

plants, and to three, four, or five, &c. in older Vines; then plant them along the wall, &c. in the common method of planting, ten or fifteen feet diſtance if for a full plantation; or if ſtraitened for room may plant ſome in the vacant intervals, between Peaches and Nectarines &c. giving them a moderate watering to ſettle the earth, and promote their rooting; then directly faſten their ſhoots to the wall or eſpalier, ten or twelve inches aſunder.

The General Culture, &c.

In the general culture of Vines, obſerve they may be trained either horizontally or upright, as the ſpace of wall admits; and that in reſpect to pruning and training, as they ſhoot numerouſly every Summer, the general mother branches ſhould

ſhould be ranged ten or twelve inches diſtance, at leaſt, in order to have ſufficient room to train the requiſite ſupply of the immediate-bearing ſhoots of each Summer, and other regular-placed ones, for next year's bearers.—And as they every year produce a more numerous ſupply of ſhoots than can be trained or converted to uſe, conſiſtent with regularity, they accordingly require a regulation of pruning and training every Summer and Winter.

In Summer ſhould go over the Vines frequently to regulate the growths of the year; commencing the firſt regulation early in May, or as ſoon as the fruit-ſhoots diſcover the fruit buds, and before the general ſhoots run into confuſion, which would occaſion much anxiety

and

and perplexity to regulate, as well as prove detrimental to the growth of the Grapes, which ſhould have every poſſible advantage of the ſun, to accelerate their perfection.

Therefore, in this ſeaſon, (Summer) begin early to rub off all the very weak, ſtraggling, evidently unfruitful, and other uſeleſs ſhoots of the year, and particularly ſuch as riſe directly from the old wood, unleſs required to ſupply vacancies, retaining all the good fruitful ſhoots, diſcovering the bunches of flowers in infancy, alſo a ſufficient ſupply of other well placed ſtrong ſhoots, to have plenty to chuſe from in Winter pruning, for next year's mother-bearers; at the ſame time diſplacing all others that are obviouſly

ſuperfluous

ſuperfluous or unneceſſary, and all ſmall laterals ariſing on the ſides of the reſerved ſupply, which, when long enough, train in at full length; or, in July, may top the preſent fruit-ſhoots, to throw a greater ſupply of nutriment to the fruit; but ſhoots not furniſhed with Grapes may generally be extended as far as you can, for if ſhortened too early in their growth, they will force out numerous uſeleſs lateral ſhoots, crowding the Vines, and prove hurtful to the buds from which we are to expect the next year's fruit ſhoots; ſo ſhould generally run them as far as they have room, till Winter pruning.

After performing the general Summer pruning, and dreſſing the Vines, we ſhould review them every week or fortnight, to adjuſt caſual irregularities, diſplace

place all after-ſhoots, and to train the regular ſupply along cloſe to the wall, &c. as they advance in length, in order both to preſerve the requiſite uniformity, and to admit more freely the neceſſary benefit of the ſun and air, to promote and improve the growth of the fruit, which, in this country, requires every poſſible advantage, to forward and ripen it in due perfection.

The Winter pruning may be performed any time, from the fall of the leaf till Spring, obſerving we are now to regulate both the young ſupply of future-bearing wood retained in Summer, as well as the old bearers, and long naked branches, ſome of which ſhould always be pruned away annually, in Winter, down to lower branches, to make

room to train the young ſucceſſion bearing ſhoots.

Therefore, ſelecting a general ſupply of the moſt eligibly-placed ſtrong ſhoots of laſt Summer, ariſing principally on the year-old wood, to retain for next year's mother bearers, advancing at proper diſtances regularly from the bottom upward, between the older branches in ſucceſſive order, one behind another; retaining generally one on each former year's branch, or ſometimes two in wide ſpaces, if neceſſary, and prune out all the ſuperabundant ones, with all weak and irregular ſhoots quite cloſe, together with part of the former bearers, pruned down to their reſpective ſucceſſional ſhoots, now proper to retain; as likewiſe long naked old branches,

ches, not furniſhed with young wood, or that are advanced to the top of the wall, cutting them down to the beſt lateral branches, or ſhoots they ſupport, thereby making room to train the general ſupply of young bearers ten or twelve inches diſtance, with one forming a leader to each main branch, and ſome always advancing from below: as you proceed, let all the reſerved ſupply of ſhoots be ſhortened, from three or four, to ſix eyes or joints, or more, according to their ſtrength and ſituation on the Vine; or if you want to run them along any vacant or high ſpace, may be occaſionally left longer in proportion; performing the ſhortening juſt above an eye, with a ſloping cut upwards.

As ſoon as pruned, nail the whole cloſe

to the wall, &c. either inclining horizontally, or more aſcending, as the ſcope of walling admits, arranging them ten or twelve inches diſtance, at leaſt, to allow full ſcope to train the enſuing Summer's ſhoots between.

Where any part of the bottom of the wall is naked of bearing wood, or that you would extend the Vines farther, may lay down any convenient branches in the earth, and they will root and ſupply the places required.

Of Eſpalier Vines.

When deſigned to have Vines in eſpaliers, plant them in ſunny expoſures, and manage them as directed for the wall Vines; one mode of culture will ſuit in both kinds of training, or as below for the Vineyard.

Of

Of the Vineyard Vines.

Vineyards are plantations of Vines, cultivated in the open ground, without the aſſiſtance of walls, or any other cloſe fences, but arranged in ſeveral parallel rows, croſs-ways the ground, eight or ten feet diſtance, one row from the other, and the branches of the Vines trained along to ſtakes, ranging the way of the rows, eſpalier ways; and are deſigned principally to produce large quantities of Grapes for making Wine.

This is the common method abroad, in the wine countries, of cultivating their very extenſive plantation of Vines for affording the general vintage of Grapes for the purpoſe of making wine as aforeſaid.

It

It has alſo been attempted in England, in moderate plantations, but not with ſuch general ſucceſs as abroad, in warm climates, our autumn ſeaſons not proving always favourable enough to ripen the Grapes in any due perfection; it, however, is worth the trial, as Vines will often bear abundantly in this order of training; and we have alſo had them ripen in tolerable good perfection, eſpecially when growing in a warm dry ſoil, and ſouthern expoſure, open to the full ſun.

Abroad they often plant their vineyards, on hilly, or on any elevated ſituation where the ſoil is dry and warm, and to obtain this they often plant on ſtoney, rocky, chalky, or gravelly places, that the warmth of the ſoil may contribute

tribute to forward the ripening and improving the flavour of the Grapes; and ſuch ſituations and ſoils have alſo been employed in England for the ſame purpoſe, with tolerable ſucceſs.

However, they may be planted to form Vineyards in any common dry ſoil, not too clayey or wet, and that lies well to the full ſun, from riſing to ſetting, or on the ſide of a moderate acclivity, facing the South; preparing the ground by proper trenching, or deep ploughing, &c.

The plants for this purpoſe may either be layers, raiſed as we before directed, or cuttings, either planted at once to remain, as before explained in the garden culture, or planted in the nurſery, and trained

trained a year or two; then tranſplanted into the vineyard.

Obſerving, however, in planting them in the vineyard, to ſet them ſix or eight feet diſtant in the row, with an interval of ten feet between the ranges.

Obſerve, likewiſe, if at the time of planting them they are furniſhed with one, two, or more ſhoots; let each be pruned to about three buds or joints, in length, and faſten them to ſhort ſtakes placed in the ground for that purpoſe, as below.

Then, as to their general future culture, the branches muſt be conſtantly trained to ſtakes, arranged along each row of Vines, about three feet high, at firſt; but as the Vines advance in age, ſtrength,

ſtrength, and number of branches, muſt have higher and ſtouter ſtakes; training the ſhoots to the ſtakes with oſiertwigs,&c.

In Summer, when they ſhoot forth, clear off all ſmall twigs ariſing on the main ſhoots of the year, and other weak uſeleſs growths, training the main young ſhoots along to the ſtakes, at full length all Summer: in Winter ſhorten them to three eyes,and when they ſhoot again, in Summer following, manage them as before, continuing to encreaſe the main branches to ſix or eight on each plant.

But when the Vines are three years old, or more, having ſix or eight principal branches, and bear tolerably, may top the young bearing ſhoots of the year, in June, to two or three joints a-

bove the fruit, to forward and ſtrengthen its growth, clearing off all lateral twigs, and uſeleſs ſuperfluous ſhoots, and training the others cloſe to the ſtakes; in Winter pruning, ſelect ſix, eight, or ten of the ſtrongeſt, beſt-placed young ſhoots of laſt Summer on each plant, for next year's bearing, pruning out the ſuperabundancy, as in the garden Vines, and ſhortening the reſerved ſhoots; the ſtrongeſt ones cut to four or five joints, and the weaker prune to three eyes each; then faſten them along regularly to the ſtakes, an equal number to the right and left, ten or twelve inches aſunder; thoſe next the ſtem may be trained nearly upright, but the lower ſhoots ſhould be extended more horizontally.

Every Spring, after Winter pruning and

and dreſſing the Vines, the ground between the rows ſhould be neatly digged, and about once in three or four years add ſome manure, either of good rotten dung, or a compoſt of dung and freſh earth, lime, &c. applying it at the above ſeaſon, digged in one ſpade deep.

All Summer keep the ground very clean from weeds, by frequently hoeing it in dry weather, to preſerve a clean dry ſurface, in order both to admit the ſun freely to the ground, and to reflect its heat more powerfully on the fruit, which will contribute conſiderably towards improving its growth, and enriching its flavour.

The WALNUT TREE.

THE Walnut *(Juglans)*, is one of the largeſt fruit trees of the nut-bearing kind, and is worthy of culture as common ſtandards, in orchards, parks, and any out grounds for the ſake of its fruit, which is valuable, both to uſe whole, while young and green, as an excellent pickle, and when ripe, to eat the kernels raw; conſiſting of ſeveral varieties, all ſeminals of one parent, which belongs to the claſs and order *Monoecia Polyandria*, i. e. male and female flowers apart, the males having many ſtamina.

The ſpecies of Walnut commonly cultivated as a fruit tree, is, according to the botaniſts,

Juglans

Juglans Regia, COMMON WALNUT TREE; deſcribed *Juglans, with winged leaves, of five or ſeven large oval, nearly-equal, ſmooth lobes*, and with ſmall ſix-parted male flowers, in oblong, ſcaley catkins, and females in cloſe-ſitting cluſters, ſucceeded by large, oval and round-diſh green fruit, each including one large, oval, furrowed nut, containing a four-parted, eatable kernel, ripening in September and October, and comprehends the following varieties.

EARLY OVAL WALNUT.
COMMON OVAL WALNUT.
ROUND WALNUT.
LARGE WALNUT.
LARGEST FRENCH WALNUT.
LARGE DOUBLE WALNUT.
LATE-RIPE WALNUT.

TENDER

TENDER-SHELLED WALNUT.
HARD-SHELLED WALNUT.

The Walnut tree grows forty or fifty feet high, branching out widely around, garniſhed with large pinnated leaves, and produces the flowers and fruit near the ends of the former and ſame year's ſhoots, towards the extreme parts of the branches, growing generally in cluſters; the flowers appear in April and May, ſucceeded by the fruit in June and July, gradually encreaſing in growth till September, when the Walnuts begin to ripen; and when arrived to full perfection, the green outer cover divides and diſcharges the nut, containing the eatable kernel.

As we above hinted, the fruit of the Walnut tree is uſeful in two different ſtages of growth, viz.

When

When green, young, and tender, in July and Auguſt, about half or three parts grown, is excellent for pickling, uſing them whole, the outer cover, ſhell and kernel together, before the ſhell becomes hard, when they make a very fine high-reliſhed pickle for uſe the year round.

And when fully ripe the latter end of September, and in October, the kernels being of an agreeable bitteriſh flavour, are exceedingly palatable to eat, and continue in perfection ſix weeks, or two months, or may be kept double that time in a dry room, cloſely covered with ſtraw or dry ſand.

So that the Walnut, conſidered as a fruit tree, highly deſerves a place in the collection,

collection, trained as common ſtandards, in orchards, parks, avenues, and the borders of fields, or on any out parts, either in continued ranges, forty or fifty feet aſunder, or more, where large quantities of the fruit are required for any public demand, or in detached ſtandards, ſingly, here and there, or arranged on the boundaries of orchards, &c. in aſſemblage with Cheſnuts, where they will alſo defend the interior more capital fruits from the inſults of boiſterous winds, in all of which they ſhould generally be employed as full ſtandards, with ſix or ſeven feet ſtems, and ſuffered to branch out above into ſpreading heads, without ſhortening the branches, as they bear always moſtly towards the extremities.

Though

Though for private uſe, a few trees are ſufficient, yet, where there is large ſcope of ground, I ſhould adviſe having plenty of them diſpoſed in different ſituations, as they will not only be profitable in their annual crops of fruit, which is always ready ſale in the markets, but will effect variety and ornament in their growth; and when arrived to timber prove valuable for many purpoſes in the cabinet and joinery branches.

It is a very hardy tree, and will ſucceed in either low or high ſituations, and almoſt any ſoil, but is the moſt proſperous in loamy ground.

Propagation and Training.

This tree is raiſed moſt commonly from the nuts; though as the ſeedlings are apt to degenerate or run to different ſorts, we cannot be certain of continuing the varieties diſtinct.

However, ſhould be careful to provide a quantity of the beſt, large, thin-ſhelled nuts, with well-flavoured kernels, when thoroughly ripe, to preſerve in dry ſand till February, then plant them in any lightiſh ground, in drills three inches deep, and a foot aſunder, and they will come up in a month or two, and grow half a foot high, or more, the ſame year; and in the firſt or ſecond Autumn or Spring after, be fit to plant out; previouſly, when taken up, ſhorten the downward top root, and plant them in nurſery lines a yard diſtance: here train them for full ſtandards, with ſingle clean ſtems, ſix feet high or more, then permit them to branch out at that height, and form full heads, after which they may be planted out finally to remain.

They rarely begin to bear till ſeven or eight year's old, but not conſiderably till they attain a large growth.

Final Planting, &c.

The planting of Walnut trees may be performed when they are from ſix to ten or twelve feet high, though if not more than ſix or eight feet they may prove more ſucceſsful: the proper ſeaſon is either at the fall of the leaf, or the following months, till March, taking them up with good roots, of which trim off only broken parts, and leave the top entire, then plant them where required, thirty or forty feet diſtance, and let each be ſtaked, to prevent their being diſturbed by tempeſtuous winds.

As to culture, hardly any is required; let them generally branch out all around, according to their natural growth, except occaſionally to lop any very irregular bough, low ſtraggler, or very long rambling branch.

When deſigned to gather Walnuts to pickle, July and Auguſt is the time, be-

fore the ſhell is hard; chuſing ſuch that are as free from ſpecks as poſſible, and gathering them carefully in a dry day, by hand, without bruiſing.

As to the ripe fruit, they are ready, ſome the latter end of September, others not till October; when thoſe on ſmall trees may be eaſily gathered by hand, as wanted, but on trees with high, and widely-extended heads, they are commonly beat down with long poles; and as the outer huſk or cover generally adheres cloſe, they ſhould be gathered up in heaps, to ferment and ſweat a few days, when the green covers will ſeparate from the nuts, which being then cleaned from the rubbiſh, lay them up in a dry room, or in boxes or tubs of ſand, for uſe.

GENERAL OBSERVATIONS.

Of Grafting and Budding.

THESE methods of Propagation are effected by the inſertion of a young ſhoot or bud of any deſirable variety, into the ſtock or ſtem of another of the ſame genus or family, or at leaſt of one nearly related to it; and theſe uniting, ſhoot forth into branches; forming the new tree of the intended ſort, producing fruit in all reſpects like to that of the parent one; thus our choice varieties of fruits are encreaſed and continued.

The firſt thing to be obſerved reſpects the proper ſtocks. Apples ſucceed only upon Apple-ſtocks; Pears upon Pear-ſtocks, or occaſionally on Quinces, as being of the ſame *genus*.; ſo of Plums

and

and Cherries, and moſt other fruit trees except in Peaches, Nectarines, and Almonds, which, though of the genus *Amygdalus*, ſucceed upon the *Prunus* or Plum-ſtock, which is of the ſame claſs and order, and the favourite ſtock, in being more hardy and durable than thoſe of their own kind: It muſt likewiſe be obſerved, that though the ſeveral ſpecies of any genus will ſucceed upon one another, yet there are particular ſorts in the ſame family more peculiarly adapted to their own ſpecies; for inſtance, the Apple and Pear being different ſpecies of the ſame genus, will grow upon each other, but not proſperouſly: Plums and Cherries may be produced one on the other, but not near ſo ſucceſsfully as each on its own ſtock, and ſo of many others.

The

The methods of raiſing the different ſtocks are by ſeed, ſuckers, layers, and cuttings, but principally from the ſeed, kernels, or ſtones of the reſpective fruits, ſowed in Autumn or Spring, in beds of light earth, one or two inches deep. At a year old they are to be planted out in nurſery-rows a yard aſunder, where, in a year or two after, many will be fit to graft or bud to form for dwarfs wall and eſpalier trees, and in three, four, or five years for ſtandards.

Grafting and Budding are alſo occaſionally performed on trees which already bear fruit, with deſign either to change the ſorts, or have two or more kinds of fruit on the ſame tree.

The months for Grafting are February and

and March, beginning with the earlieſt ſorts, and ending with the late-ſhooting trees, ſuch as Apples, &c. the ſhoots for cions or grafts to be collected in February, before their buds advance too much. Theſe ſhoots ſhould be the production of the former Summer, moderately ſtrong, robuſt, and clean, tie them in bundles, and place their lower ends in earth for uſe as they are wanted.

The denominations of grafting commonly practiſed, are Whip-Grafting, Cleft-Grafting, and ſometimes Crown-Grafting, but chiefly the firſt of theſe, being the moſt expeditious and ſucceſsful.

Whip-Grafting is adapted to ſmall ſtocks, about half an inch thick, if the ſtock

ſtock and graft are nearly of a ſize, the grafting will ſucceed the better. Cut off the head of the ſtock, at the height intended to form the ſtem, with a ſlope near two inches long, make a thin ſlit downward, from the top of the ſlope, about half an inch, then ſhorten the cion at top to five or ſix eyes, and cut the lower end ſloping; make alſo a ſmall ſlit or tongue near the top of the ſloped part, upwards, ſo as to fit, being careful, however, in tongueing the graft, not to go too deep towards the back of it; apply the tongued part of the graft in the ſlit of the ſtock even and cloſe, bind them with a ligature of baſs ſeveral times round, and ſecure the whole with a coat of clay an inch thick, and an inch above and below; finiſhing in a rounding form,

ſo perfectly cloſe, that neither ſun, wind, or wet may enter, which would render the whole ineffectual.

Cleft-Grafting is performed by cleaving the ſtock. It is generally intended for large ſtocks, an inch or two diameter, cutting off the head at the height you deſign the ſtem, ſloping one ſide about an inch in length, and with a ſtrong knife, placed croſs-ways at the top of the ſtock and ſloped part, cleave it for the admiſſion of the graft, wedging the cleft open until the graft is inſerted; which is previouſly to be ſhortened to five or ſix inches, and the lower end ſloped on two ſides near two inches long; one edge made thicker than the other, and thereof the rind preſerved entire, then

then introduce the graft into the back of the ſtock, with the thickeſt edge outwards, joining exactly rind to rind. Carefully remove the wedge, that the cleft may cloſe upon the graft, and tye the parts firmly together, and clay them, as before directed.

If two grafts are to be inſerted, cut off the head of the ſtock horizontally, cleave it right acroſs, and inſert a graft on each ſide, tying and claying them as before directed.

Crown-Grafting is performed occaſionally upon ſtocks which are too large to cleave; the head being ſawed or cut off horizontally, ſeveral grafts are inſerted around the crown or top, betwixt the rind and wood; the grafts firſt ſlo-

ped off on one ſide, forming a kind of ſhoulder at top, ſlit the rind, and ſeparate it from the wood with a wedge, and introduce the grafts between, tie and clay them, as before.

Grafts and ſtocks in general effect their junction in ſix or eight weeks; and towards the end of May will begin to ſhoot, when the clay may be removed, but the bandage muſt remain three or four weeks longer; if the clay in any inſtance ſhould crack or give way, immediately remove it, and apply more.

Budding or Inoculation.

This is effected by introducing ſmall buds into the ſide of the ſtem or branch, between the bark and the wood, on young

young ſtocks about half an inch thick; in the next ſpring to be headed down to the budded part, when the bud will begin to puſh, and make a ſhoot, perhaps half a yard, or a yard in length.

The beſt ſeaſon for budding is from the middle of July to the middle of Auguſt, as the buds ſhould remain dormant till the following ſpring. If budded in June, they are apt to puſh out weak ſhoots the ſame year that will probably be killed in the enſuing winter. The buds for inſertion are to be procured from young ſhoots of the ſame year's growth: procure therefore a quantity of cuttings, and take off their leaves to about a quarter of an inch of the buds; being furniſhed with a proper budding knife, and

and ſtrong new baſs ſoaked in water, prepare the ſtock for the bud, at the height intended: on a ſmooth ſide of the ſtock cut the rind tranſverſely, quite through to the wood, and from the middle of this make another cut downwards, an inch long, which, with the flat handle of the knife, muſt be opened on each ſide, ſeparating the bark from the wood, then cut off one of the buds, enter the knife in the ſhoot, half an inch below the bud, cut a little into the wood, and run it ſlanting half an inch or more above, bringing it off with a ſmall portion of the wood adhering, which muſt be directly detached from the bud, either with the point of the knife or the thumb and finger, obſerving inſtantly whether the eye or gem of the bud remains. If a

ſmall

ſmall hole appears, it is bad, and another bud muſt be uſed; place it with the back part between the lips, till you have expeditiouſly opened the bark on each ſide of the perpendicular cut in the ſtock, clear to the wood; introduce it at top, ſlipping it down between the bark and wood, to the bottom, making the upper end alſo join with the horizontal cut at top; let the parts be immediately tyed with a ligature of freſh tough baſs mat, bringing it cloſely round from bottom to top, except juſt over the eye of the bud, and the buſineſs is finiſhed, no claying being wanted, as in grafting. In three or four weeks the buds will unite with the ſtock, and the parts begin to ſwell, then looſen the bandages. Juſt before they begin to ſhoot, which will not be till ſpring,

let

let the head of each ſtock be cut off aſlanting, a little above the bud, which will ſoon puſh forth. In the Autumn the trees may be tranſplanted into the garden, or as directed in the reſpective articles.

Obſerve, that all ſhoots ariſing from the ſtock or ſtem, except the grafts or buds themſelves, muſt always be diſplaced as ſoon as poſſible. Further particulars will be found fully explained under the proper articles.

Situation, Expoſure, and Soil.

CONCERNING the ſituation eligible for *Fruit Trees*, it may be obſerved, that thriving trees and good fruit are produced both in high and low grounds, where the ſoil is proper; too low a ſituation,

ation however, is ſubject to inundations, or too copious moiſture. Few fruit trees are ever proſperous for any continuance in very low wet places; however, in moſt ſituations, whether higher, lower, or moderately ſloping, if good ſoil and not wet, moſt ſorts of fruit trees may be ſucceſsfully cultivated.

Sometimes a moderately low ſituation, not wet, may have the advantage, by being more out of the power of cutting blaſts and tempeſtuous winds. A gentle ſlope towards the ſouth, or ſouth-eaſt or weſt, is a deſirable poſition. Where the ſituation for an orchard can be ſo contrived as to have the ſhelter of an adjacent foreſt tree plantation, at a little northerly diſtance, it will be an additional advantage.

As to Expoſure, this may be varied in different trees. In wall-trees it may be more effectually practiſed by planting the more tender and choice ſorts againſt walls of a ſoutherly expoſure. Walls of an Eaſt or Weſt aſpect are proper for ſucceſſional crops of the ſame ſorts, as well for the more hardy and common wall-fruit, northerly walls may continue hardy ſummer fruits, late in the ſeaſon; ſuch as cherries, plums, currants, &c.

Though an aſpect full to the ſun is always to be preferred, we may ſee fruit-trees in a proſperous ſtate in almoſt all expoſures, even ſometimes full to the North, the moſt unfavourable of all.

With reſpect to Soil, it may be alſo obſerved, that moſt ſort of fruit-trees will proſper in any common good ſoil,

being

being one good ſpade deep of fertile mold; but if two or three ſpades deep, the greater the advantage. In a loamy ſoil, not too ſtrong and clayey, moſt fruits are proſperous; but a moderately light ſandy loam, of a pliable texture, free and eaſy to work at all ſeaſons, makes a deſirable ſoil. The ſtrongeſt loams, however, may be meliorated with good dung, coal aſhes, ſandy earth, and other light opening ſubſtances. In gardens, not naturally of a loamy ſoil, we ſometimes, from a paſture, common, or field, procure a ſufficiency to prepare the borders intended for wall trees, either wholly, or part, working it with ſtore of dung, and a portion of the natural ſoil of the borders, one or two ſpades deep. But any good earth of a blackiſh, hazelly, or brown colour,

moderately light, fatty, and pliant, a ſpade or two deep will be found ſufficiently eligible for fruit-trees. Strong, ſtubborn, rank clayey ſoils are bad, but may be improved by light open mixtures; ſuch as compoſts of ſandy earths, coal aſhes, plenty of rotten dung, &c. at all opportunities.

A too light or ſandy ſoil muſt be fertilized by plenty of good dung, and occaſional applications of ſtrong ſh earthy compoſts, and cold wettiſh ſoils muſt alſo be occaſionally mended with light warming ingredients, ſuch as juſt mentioned. But in low wet ſoils the ſituations for fruit trees ſhould either be raiſed proportionally with compoſts of dung and earths worked up with the natural ſoil, ſufficient to have the roots diſtant from

from under-ground water, or there ſhould be canals or drains contrived to carry off the redundant moiſture.

When the good ſoil of the garden is naturally too ſhallow, that is, leſs than a ſpade deep, ſome of the bad ſoil below ſhould be excavated a foot or more deep, and a compoſition of good earth and dung brought in to fill up the place. But in the open ground, where ſtandard fruit trees are intended, and the ſoil requires amendment, and it may be too expenſive and troubleſome to make a general improvement, the addition of compoſt, from five to ten feet diameter, and one deep, will be ſufficient upon the ſpot where the tree is to ſtand.

The borders for wall and eſpalier trees may be from about three or four to eight

feet

feet wide, according to the ſize of the garden; but it is of much importance to have wide borders, that the roots may have ſufficient ſcope to ſpread.

Method of Planting Fruit Trees.

ONE general method ſerves for all the different ſorts of fruit trees.

In taking them up for planting, the greateſt precaution is neceſſary for raiſing them with as large a ſpread of roots as poſſible; the root may require trimming, ſo far as to retrench any maimed or decayed parts, but retaining carefully all the main horizontal ones, moſtly at full length, except juſt tipping off the ends ſloping on the under ſide, and reducing any very long ſtragglers. With regard to the head; if a tree of only

one

one year old, having the firſt ſhoot from the graft or budding entire, let the whole remain at the time of planting until March, then headed down to a few eyes, as directed in their different articles; if an older tree, which has already been trained in the nurſery, and has formed a head of branches, prune out only any very irregular ſhoot or branch, not conſiſtent with the general form of the head, and reduce long ſtragglers, but retain all the regular branches entire, at leaſt for the preſent; and thoſe that are uſually ſhortened in the common courſe of pruning, ſuch as peaches, nectarines, &c. may have it performed after they are planted, as ordered under their proper heads; but apples, pears, plums, cherries, and ſuch other trees as are not generally

ſhortened

ſhortened, ſhould have all their regular branches retained entire. In large trees, with very full heads, it may be proper to reduce the long and crowding branches, not only to leſſen the head in ſome proportion to the root, but that the power of the wind may be checked till the tree is firmly rooted afreſh.

The trees being ready, and the ſpaces marked out for planting, proceed to dig a round aperture for each tree, capacious enough to admit its full ſpread of roots every way, about one ſpade deep, ſo as, when planted, the uppermoſt ones may be only from three to ſix inches below the ſurface; then placing the tree in the middle with its roots ſpread around, trim in the earth, the fineſt mold firſt, the reſt as it comes to hand, breaking all large

large clods, ſhaking the tree upward by the ſtem, to make the earth ſettle cloſe between the roots and fibres; and when the earth is all in, tread it gently firſt round the outſide to ſettle the earth to the extreme roots, then gradually towards the ſtem, to fix the plant in its proper poſition, finiſhing with a ſmall hollow at top for occaſional waterings. As ſoon as planted let wall and eſpalier trees be nailed and faſtened to the walls, &c. and the ſtandards, if tall ſtems and largiſh heads, ſupported with ſtout ſtakes to keep them ſteady till firmly rooted in their new quarters. It may likewiſe be proper in winter-planting, or late in ſpring, to mulch the ſurface of the ground about the tenderer or choicer kinds, to the full width of the hole the tree ſtands in, and about two or three inches thick, which will be a

defence from winter froſt, or drying winds, till they have taken good root. Likewiſe in dry light ſoils may give a pot of water to ſettle the earth, and prepare the tree for rooting afreſh, particularly in late ſpring planting, repeating it occaſionally, but by no means water ſo freely as to render the earth miry, but moderately moiſt, for, if continued too wet, it will chill and rot the tender fibres.

Protecting the Bloſſoms, and thinning young Wall Fruit.

PROTECTION of the Bloſſoms of peach, nectarine, and apricot wall trees in unfavourable ſprings, is effected different ways, but the moſt eligible is either by mats, or cuttings of evergreens. The mats are to be occaſionally nailed up before the trees, when there is an appearance

pearance of ſharp froſty nights; if the froſt continues long, and no ſun, let them remain up in the day alſo, but muſt be removed at every favourable appearance of moderate weather. The cuttings of evergreens, as being always furniſhed with leaves, are often uſed; ſtick theſe between the branches, ſo as to cover and afford ſhelter to the bloſſoms and infant fruit, and permit them to remain conſtantly night and day, till the fruit is fairly ſet, and ſomewhat advanced in growth; which often proves more effectual than matting, and is attended with conſiderably leſs trouble.

Sometimes, in default of a ſufficiency of mats or evergreens, we uſe the cuttings of hornbeam, or the branches of dried fern, either of which, retaining the old leaves, and being ſtuck between the branches, will afford ſhelter.

Thinning

Thinning young wall fruit is occaſionally neceſſary in favourable ſprings, when the tree ſets more fruit than it can afford room for, or than it is able to bring to perfection, which is common to apricots, peaches, and nectarines. This work ſhould begin when the fruit is not larger than the end of the finger, be purſued with great care and regularity, ſelecting the largeſt, moſt promiſing, and beſt placed fruit, to ſtand for the crop, and thin out the worſt; leaving the proper fruit in proportion to the ſtrength of the ſhoots; that is, one or two on the weaker ſhoots, three on the middling, and not more than four or five on the ſtronger ſhoots, but no where too cloſe together.

FINIS.